Fall 12-13-2018

Practices that attribute to the success of boys: A study of Title I middle schools in Texas

Laura L. Duhon
laura.duhon@student.shu.edu

Practices that attribute to the success of boys: A study of Title I middle schools in Texas

by

Laura Latiolais Duhon

Dissertation Committee

Daniel Gutmore, Ph.D., Mentor

Elaine Walker, Ph.D.

Barbara Davis, Ed.D.

Submitted in partial fulfillment of the requirements for the degree

Doctor of Education

Department of Education Leadership, Management and Policy

Seton Hall University

2019

SETON HALL UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Laura Duhon has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ed.D.** during this **Fall Semester 2018.**

DISSERTATION COMMITTEE

(please sign and date beside your name)

Mentor:
Dr. Daniel Gutmore Daniel Gutmore 12/13/18

Committee Member:
Dr. Elaine Walker Elaine M. Walker 12/13/18

Committee Member:
Dr. Barbara Davis B. DAVIS (Email on file) Barbara Davis PD 12/13/18

The mentor and any other committee members who wish to review revisions will sign and date this document only when revisions have been completed. Please return this form to the Office of Graduate Studies, where it will be placed in the candidate's file and submit a copy with your final dissertation to be bound as page number two.

ABSTRACT

While it is commonly believed that boys are more successful than girls academically, research shows that boys are failing to thrive, academically, behaviorally, and socially. Boys comprise 70% of school suspensions as well as 80% of high school dropouts along with other alarming statistics. The purpose of this research study was to investigate approaches that contribute to the success of boys within six Title I middle schools located in various regions of Texas. These schools were selected based on state assessment (STAAR) scores where their male population was achieving the same or greater success as the females as measured by the state assessment. A cross-sectional online survey was used to determine the approaches educators at these schools implement that contribute to the success of boys. The study's findings suggest that the six studied middle schools are implementing practices and programs that contribute to the success of boys. An overwhelming majority of teachers and administrators agreed on the survey that their school was in fact implementing programs and practices that contribute to the success of boys. The results revealed within this study imply that in fact the practices suggested by the literature are significant to the success of boys. The educators responding to the survey noted the use of many of the practices and programs referenced and suggested in the literature. There is thus a sound argument for other educators to implement these programs and practices in attempting to close the achievement gap between boys and girls.

DEDICATION

My Son, Beau,
and
My Mom

ACKNOWLEDGEMENTS

God, I am thankful every day for the many blessings in my life. I appreciate the strength, positivity, and perseverance you have given me. Life doesn't come without challenges, but having faith and believing makes it all the better, knowing You are in charge.

Dr. Gutmore, thank you for never giving up on me. There were many times you believed in me more than I believed in myself. No matter what hurdles I faced, at the end of every phone call, I always appreciated your optimism as you commented about how I was one step closer to the light at the end of the tunnel. It was definitely a marathon race and I could not be more grateful that you were my mentor, there to cheer me on. I am thrilled after years of working together that we found a very special common bond in rooting for the same football team, the LSU Tigers. Billy Cannon was a remarkable player and during his famous run against Ole Miss, he must have been filled with the same feelings I have now at the end of this journey … excitement, celebration, satisfaction that he stuck with the run, persevering to a touchdown, and probably pure exhaustion once he came down off the adrenaline! I may not have won a Heisman trophy, but I did win with you as my guiding support as I completed the biggest academic accomplishment of my life!

Dr. Walker, thank you for challenging me as a researcher and writer. With each revision and additional analysis, I became a better writer and the dissertation developed into a stronger study. I always appreciate your calm and soothing demeanor, especially when you could hear in my voice the trembling of nervousness, tears, or uneasiness (and sometimes all of them at the same time).

Dr. Barbara Davis, there are not enough words to truly express my appreciation for your friendship, mentoring, and support and the love you have shown me as if I was your own

daughter (your “other Laura” has always been such a term of endearment for me). You are a true model of faith, hope, and love. Your strength is unwavering. You have always brought out the best in not just me but everyone around you. My life is forever enriched because of you. I love you dearly!

Cohort 15, I could not imagine going through this experience with a more fun group of people. I will remember everything, from the slow clap to the forever nickname “Texas.”
My travel buddies, Tyrone and Doug: you are true examples of gentlemen and role models.
My roomie, Shauna: God (or Lynn) knew exactly what He (she) was doing when we were put together as roommates. I have always admired your ability to balance discipline and having fun. We shared our love for our respective sororities and so many other things, however, my favorite is all the good laughs. Thank you for all the fun trips into the city!
Karlin and Tracy, thank you for always putting up with Shauna and me coming to your room, eating your snacks, or just sitting around having a good laugh.
Sharon, oh what a beautiful lady you are, inside and out. A true role model for us all. Your grace, positivity, professionalism, and passion for our cohort makes this world a better place.
Monica and Lisa, it is such a pleasure knowing you ladies and sharing special times together.

My university colleagues (who know this process all too well), you were always encouraging yet sensitive when asking me about finishing, nonetheless always cheering me on to keep at it. Many thanks as well to my wonderful university students who always provided a great deal of support while also bringing me so much joy in what I get to do as a career.

Exchange teachers, thank you for all your love, support, encouraging messages, and flexibility when I needed time to work to reach my next deadline. You truly are the best in the business and I count my blessings every day for you all!

Teachers, to all the teachers who ever made the comment to me "I don't know what to do with him"—I always said I wanted to write an article and title it that. Little did I know it would become something much greater … a dissertation research study!

Daddy, thank you for being more excited than anyone else to read my dissertation. I appreciate how you tell me every time we talk how proud you are of me. Education has always been so important to you and I am glad I could reach the highest level of education. Thank you for instilling within me a true love for learning.

Beau, you are my boy God blessed me with right in the middle of my doctoral program coursework. Because of you this topic became even more important. There were many days that were extremely challenging being a mom, working full time, and studying for my doctorate, but in the end it was all worth it. Through these experiences and life challenges, you and I both learned a very valuable lesson in perseverance. I hope you continue to have educators in your life who value your strengths, like the teachers you have already experienced and the ones who participated in this study. Remember to always work hard, persevere, keep positive, and enjoy the journey. I love you!

Mark, thank you for sacrificing time that I spent away from you as I chased this goal. I appreciate all your hard work taking care of our house, cars, etc., and making sure everything is always well kept for us. I am excited to now have more time to enjoy life with you and Beau. I love you, babe!

Mom, I did it! I am sorry you are not here on Earth to see me finally accomplish the completion of this dissertation (which you continuously worried about). You worried about a lot of things, but you were always faithful. I know there were many rosaries prayed especially for me to finish this dissertation. You sacrificed a great deal to make sure Bobby and I had the best

life we could. My education was a top priority for you. You did whatever it took to help financially, support me with Beau, or just offer encouraging words like “It will be alright.” I feel your love daily and know how proud you are. I miss you and love you very much.

TABLE OF CONTENTS

List of Tables

CHAPTER I

INTRODUCTION

Title IX begins by stating, "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefit of, or be subject to discrimination under any educational programs or activity receiving federal financial assistance" (Valentin, 1997). Title IX was voted into law by the U.S. Congress as part of the Education Amendments of 1972 to the Civil Rights Act of 1964. This historic legislation brought attention to the issue of equality between men and women in athletic programs. However, it has attracted attention related to its application to academic performance as well.

Following Title IX, the Women's Educational Equity Act, passed in 1974, influenced legislative action relating to educational equity for women (Valentin, 1997). The concern that female students were being shortchanged in academic settings brought about the Gender Equity in Education Act of 1993, which mandated Congress to investigate academic performance of girls compared to boys (Sommers, 2013). The report, entitled *Trends in Educational Equity of Girls and Women*, was published by the Department of Education in 2000. Sommers (2013) expressed how women's activist organizations anxiously awaited the report, anticipating that it would demonstrate that female students lagged far behind their male counterparts. This is not what the report showed. Instead, it showed that female students were actually outperforming male students in many subjects and that the gap between male and female students in math and science was narrowing. Although girls' performance in math and science was increasing, these areas were still targeted as areas of concern rather than highlighting the fact that girls were outperforming boys in reading and writing.

The difference in reading literacy achievement between male and female students was

made more evident in the 2011 *Progress in International Reading Literacy Study* (PIRLS). Among the 53 international education systems participating in the study, 47 (including the United States), reported females' reading scores were significantly higher than those of males (Thompson et al., 2013). The study revealed that weakness in male reading literacy achievement compared to female achievement was an international issue.

As required by the No Child Left Behind Act, the National Assessment of Educational Progress in reading and mathematics is administered biennially nationwide to grades four and eight. The results are made public in a report called the *Nation's Report Card*. In the 2011 report of grade four reading achievement, boys continued to perform on average seven points lower than girls. This was not a significant change from the 2009 results (National Center for Education Statistics (NCES), 2011b). According to the 2011 *Nation's Report Card for Mathematics* in grade four (NCES, 2011a), males scored slightly higher than females by an average of one point, which was also an insignificant change from 2009. Both female and male students increased their scores by a point between 2009 and 2011.

Differences between male and female performance in mathematics and science has received considerable attention from researchers since the 1980s (You, 2010). The focus on females' performance in science and mathematics appears to have increased their academic performance, while the deficit for males in reading achievement scores remains widespread. Both are consistently supported by current data. According to Martin and Mullins (2013), "There were essentially no gender differences in mathematics or science, although the total effect on reading achievement was rather substantial" (p.12).

An additional variable where data supports a gap in academic achievement is socio-economic status. This variable focuses on the difference in academic performance between

students who qualify for free and reduced lunch—an indicator of lower family income—and those who do not. The 2011 *Nation's Report Card for Mathematics* in grade four (National Center for Education Statistics, 2011a) found that students who did not qualify for free lunch scored 24 points higher than those who did qualify. Students who reported receiving reduced-price lunch scored 17 points lower than the students who were not receiving reduced-price or free lunch. The 2011 *Nation's Report Card for Reading* in grade four reported a similar gap between students eligible for free and reduced-price lunch and those who were not eligible. Scores of those eligible for free lunch averaged 29 points lower than the students who were not eligible for free or reduced-price lunch. Students not eligible for free or reduced-price lunch scored 17 points higher than those who were eligible for reduced-price lunch.

Writing and science scores from the same report also showed a gap in academic achievement based on differences in students' socioeconomic status. Again, students who did not qualify for free or reduced-price lunch scored higher than those who did qualify. However, all socioeconomic groups showed improved academic performance across all subjects.

Purpose of Study

The purpose of this study is to investigate practices and programs in six Texas co-educational Title I public middle schools that contribute to the success of boys. In 2012, Texas implemented a newer version of a criterion-referenced assessment that is more rigorous than previous accountability tests. This study investigates how educators at schools where this new assessment was implemented are engaging boys to achieve success in an environment with increased rigor and pressure compared to the standardized accountability system. The study contributes to the literature investigating schools that are succeeding with at-risk populations.

Problem Statement

According to the Organisation for Economic Co-operation and Development (OECD, 2010), "Addressing the educational needs of such diverse populations and narrowing the gaps in student performance that have been observed remains a formidable challenge for all countries" (p. 6). The Programme for International Student Assessment (2014) brought attention to the fact that girls are outperforming boys across participating countries in the area of reading. Girls outperform boys in reading by 38 points on average across the OECD countries (Programme for International Student Assessment [PISA], 2014). According to the 2017 State of Texas Assessments of Academic Readiness (STAAR), girls outperformed boys for all grades that tested reading and writing. These results echo many other national and international studies that have found girls are continuing to outperform boys in reading. In fact, Voyer and Voyer (2014), in their meta-analysis, reported that in all course content areas, females showed greater scholastic achievement as measured by grades.

Jackson and Hilliard (2013, p. 311) referred to data presented in Sadker and Sadker's book, *Failing at Fairness* (2010), that supports concerns about male students' education experience in the United States.

- Boys receive lower report-card grades.
- Boys are far more likely to be grade repeaters.
- Boys suffer hyperactivity and stress nine times more frequently than girls.
- Boys are more often identified for special education.
- Boys receive greater behavioral penalties.
- Boys comprise 70% of school suspensions.
- Boys are three times more likely to become alcohol or drug dependent.

- Boys commit suicide two to three times more frequently than girls.

Gurian and Stevens (2005) reported similar statistics for male students (Jackson & Hilliard, 2013, p. 312):

- Boys comprise 80% of high school dropouts.
- Boys make up less than 44% of college populations.
- Boys, on average, are 12–18 months behind girls in reading and writing, according to the U.S. Department of Education.

As reported in the 2012–2013 Public Education Information Management System (PEIMS) data for Texas, 13.74% of male students received a discipline referral that resulted in an in-school suspension compared to 7.17% of female students (Texas Education Agency (TEA), 2013). This difference raises concerns about males' behaviors in comparison to females' behavior. If this is indeed representative of the difference between boys and girls in terms of time spent away from the classroom, then it is all the more remarkable that six Title I middle schools are making a difference for boys in relation to academic performance and social well-being.

Research Questions

The following question guided this study: What approaches can be identified as promoting the success of boys within Title I middle schools located in Texas school districts? The following questions addressed the guiding question:

1. What, if any, practices or programs are implemented by the schools to promote the success of boys?
2. Which, if any, of these approaches implemented by the schools are identified by research in the literature as contributing to the success of boys?

3. What, if any, of these approaches implemented by the schools are not identified by research in the literature, yet appear to contribute to the success of boys?
4. Are there statistically significant differences in average agreement with teacher survey questions pertaining to approaches promoting the success of boys within the school by respondent's level of education (bachelor's degree vs. MEd/EdD)?
5. Are there statistically significant differences in average agreement with teacher survey questions pertaining to approaches promoting the success of boys within the school by respondent's gender?

Organization of Study

Chapter 1 includes background information supporting the study and describes the purpose of the study, the problem statement, and the research questions the study proposes to answer. The significance of the study, along with its limitations and delimitations, are also addressed in this chapter. Chapter 1 concludes with a definition of relevant terms.

Chapter 2 includes a review of the literature on the success of boys as it relates to their performance in Title I middle schools. Chapter 3 includes details about the design of the study and the data source. Data collection methods and statistical analysis concerning the research questions are also described in Chapter 3. Chapter 4 includes the results of the study. Chapter 5 includes a summary of the study in addition to a discussion of the implications for practice and recommendations for future studies. Documentation used in the study, such as survey questions and the letter of consent for participation are included in appendices at the end of this document.

Theoretical Framework

Grounded theory, introduced in 1967 by sociologists Glaser and Strauss, was chosen as the theoretical framework applied to the analysis of data revealed within this research study. In

the context of a qualitative study, grounded theory allows the researcher to make meaning of the data collected and the phenomenon that are revealed by the study. That is, it develops "a theory that emerges from, or is 'grounded' in, the data – hence, grounded theory" (Merriam, 2009, p. 29).

The goal of the study was to understand what approaches each particular faculty and school are implementing in relation to the success of boys. Yin (2009) stated that grounded theory is valuable when a new concept or theme emerges from the research. Thus, grounded theory is a viable theoretical framework for this particular research study for building a theory from the data (Corbin & Strauss, 2008).

A second-generation innovation of the theory is constructivist grounded theory (Rand, 2013). Charmaz (2009, as cited by Rand, 2013) defined constructivist grounded theory as a theory that sees "knowledge as socially produced … takes a reflexive stance … [and] assumes that we produce knowledge by grappling with empirical problems" (p. 231). As a researcher seeking to make meaning of a phenomenon in six middle schools, this version of grounded theory allows for reflection that makes sense of the findings from the study (Rand, 2013).

Significance of Study

There is a compelling argument that there is a crisis concerning boys' academic and social success. Johnson and Gooliaff (2013) claimed, "current classroom practices disadvantage boys and contribute to higher school drop-out rates, lack of completion of college degrees, and anti-social behavior" (p. 28). National and international reports indicate that girls are outperforming boys in reading and closing the gap in other subjects. Economically disadvantaged students are also not performing as well as those who are more affluent. In the era of high-stakes testing related to No Child Left Behind, Texas will benefit from the results of an

in-depth study of six middle schools that, despite challenges, have male populations that are succeeding.

The goal of this study was to find practices that could give administrators and teachers knowledge and tools for promoting success among boys—especially those in poverty. Title I schools in Texas with similar populations (as well as other schools in different states) could also benefit from this knowledge.

Limitations

This study is not without its limitations. The study was completed within a set time span and thus is unable to show the effects of recommended practices over an extended period. An additional limitation is the voluntary nature of participation: not all qualified faculty members may be available or may agree to participate in the survey. Thus, views were received from only a portion of a larger group; those who did not participate could have added valuable information to the study. Those faculty members who responded to the survey relied upon memory to provide for accounts that were not observed by the researcher.

Six schools participated in the study; however, two additional schools were identified as possible participating schools. One of the two schools chose not to participate while the other school did not have open access to teacher and administrator email addresses, making it impossible to send surveys via email to these educators.

Additional schools were identified that demographically matched the schools studied but that had male student populations that were not showing signs of success on STAAR. These comparable schools were sent surveys, but insufficient comparable data was provided due to an extremely low survey return rate.

Delimitations

This study was delimited by the researcher to the investigation of only six middle schools within Texas. The results from the study may or may not be representative of other Title I (or non-Title I) middle schools in Texas or other states.

Definition of Terms

Academic Excellence Indicator System (AEIS): AEIS gathers information on students' performance at the school and district levels in Texas. Annual AEIS reports disaggregate student performance data by ethnicity, special education, low-income status, limited English proficiency, bilingual/English as a second language (ESL), and at-risk status (TEA, 2012). In addition to student performance data, AEIS reports also include the demographics of students as well as finances, programs, and staff information for each school and district.

At-risk: This descriptor is interchangeable with disadvantaged, delinquent, troubled, and even minority as a way to describe a population (Tidwell & Garrett, 1994, p. 445).

Latino/Hispanic: This term refers to an individual whose culture or origin is from Mexico, Puerto Rico, Cuba, South or Central America, or other Spanish cultures (Kena et al., 2014).

Public Education Information Management System (PEIMS): PEIMS is a data management system that stores all public education data reported in Texas (TEA, 2012).

State of Texas Assessment of Academic Readiness (STAAR): Pronounced "star," this is the newest form of the Texas standardized achievement test; its first administration was in 2012. STAAR is a criterion-reference assessment administered in grades three through eight. End-of-Course (EOC) assessments are administered at the high school level (TEA, 2010).

Texas Education Agency (TEA): TEA is the state education agency, which consists of agency staff and the commissioner of education. The primary responsibility of TEA is overseeing state curriculum and accountability systems, distributing state and federal funds, and collecting all public education data (TEA, 2014a).

Texas Essential Knowledge and Skills (TEKS): TEKS are standards designated for each grade level and subject area for the state. These standards set what students should be able to do and what they should know (TEA, 2014b).

Title I Schools: Title I of the Elementary and Secondary Education Act provides federal funds to schools with a high percentage of students from low income families. The funds are to be used for programs to assist all children in meeting state standards (TEA, 2015).

CHAPTER II

REVIEW OF LITERATURE

When conducting an assessment of distinct characteristics related to gender, it is necessary to note the differences between boys and girls (Fletcher, Najarro, & Yelland, 2015). Some of the factors considered in this study include the educational attainment level of each gender, cultural differences, and the role played by educators in ensuring that equality is achieved in the learning process. Over the years, researchers have found differences between boys and girls in the academic arena (Sudha, 2000).

Gender-related issues have profound significance for educators (Gurian & Stevens, 2004) and are likely to impact the learning process and achievement of all students. From an early age, there are differences between boys and girls in classroom situations. In most instances, girls can communicate efficiently and fluently earlier than boys can. Research indicates that at the age of three, approximately 99% of girls can talk (Gurian & Stevens, 2004). The same process takes about an additional year for boys. By the age of seven, another significant difference is noted: only 20% of girls experience challenges in reading. The number is significantly higher among boys: at the same age, 33% of boys are likely to face difficulties in reading (Fletcher et al., 2015). As a result, education policies that focus on literacy are likely to give girls an edge from an early age (Fletcher et al., 2015), while such methods may work against boys.

Learning practices tend to favor girls, thereby leaving boys at a disadvantage (Egan, 1998). The latter experience difficulties in the learning environment because most research into educational approaches has concentrated on ways to improve the status of women in society (Gurian & Stevens, 2004). Lagging behind from a very young age is likely to have a detrimental effect on boys' confidence and self-esteem, further affecting their motivation to learn.

An analysis of the performance of boys within a learning environment should also take into consideration factors such as differences in the rate of learning difficulties between the genders. Researchers have indicated that the rate of learning disabilities among girls is half that among boys (Egan, 1998). Males also represent the majority of cases on the autistic spectrum, with the ratio between boys and girls being 6 to 1. Finally, boys are five times more likely to be excluded from schools on grounds of suspension compared to girls (Gurian & Stevens, 2004).

Overview of Existing Research

The role of gender in education continues to be a matter of discussion in many societies (Fletcher et al., 2015). In terms of equality, emphasis has been given to educating girls at the expense of attention to boys (Gurian & Stevens, 2004). Recent research into the education of males has shown that approaches exist that let boys negotiate masculinity in a way that is positive and results in educational excellence. Younger, Warrington, and McLellan (2005), Wolfensberger (2012), Hinshaw and Scheffler (2014), and Marrs and Sigler (2012) recommended that learning institutions develop curricula that are boy-friendly. Similar work has been conducted to determine the best strategies to ensure students from impoverished families also perform better in school (Gorski, 2015; Roseberry-McKibbin, 2013; Schargel & Smink, 2014).

Other researchers have acknowledged differences in the development of boys' brains compared to girls' brains (James, 2015). Typically, there is a significant difference between the genders in the corpus callosum, which links the left and right hemispheres. It is relatively larger among females, and the growth rate of the left hemisphere is slower in boys than in girls. This difference leads to females developing formal language and communication skills earlier than males (Farooq, Chaudhry, Shafiq, & Berhanu, 2011) and explains why boys require more time to

acquire literacy skills. Farrington et al. (2012) concluded that boys tend to have compartmentalized brain activity. As a result, they are likely to be more successful when they focus on a particular activity for a considerable period before the introduction of a new task. Therefore, male learners require strategies that are unique to their masculinity if they are to succeed.

Due to the sensitive nature of this discussion, scholars have invested time in this area of study and, as a result, have made many suggestions that address such differences in development. The core of the issue concerns methods for educating boys. Simultaneously, teachers should not disregard the differences between males and females when teaching, especially with regard to younger learners whose brains are still undergoing significant developmental processes (Muchnick, 2011).

You (2010) conducted a study on brain-based dichotomies concerning the learning process in boys and girls from their early years through adulthood. Boys were responsible for 70% of D's and F's in school grades. Boys also accounted for over 80% of the disciplinary cases within schools, and the rates of learning disabilities and those taking Ritalin were 70% and 80%, respectively. Also, boys' reading and learning abilities were below grade-level. Finally, You (2010) demonstrated that the rate of dropouts among boys was 80%, compared to 20% for girls. The study clearly showed the need to correct these disparities and the urgency of developing a curriculum for boys.

Although there are effective strategies to enrich boys' brain development processes, Howard (2015) acknowledged that there are many school drop-out cases reported that are due to racial or cultural disparities and/or related to poverty. Hence, ways to help correct these problems, which are frequently reported among Latino boys, are equally necessary for

educational excellence. In particular, stakeholders (e.g., teachers, parents, policy makers, and students) must work collaboratively to ensure access to equal education for all students.

To define what might represent best practices related to learning for boys, this literature review concisely explores key findings of relevant studies. Specifically, the themes of brain development of boys, practices that contribute to the success of middle school boys of all backgrounds, and the situation of boys living in poverty are reviewed in this chapter.

Focus of the Review

Promoting the success of all students is a high priority for educators and an area of interest for many researchers. This study focuses specifically on approaches that promote the success of boys. The focus on boys in no way indicates that promoting the success of girls is less important. However, the researcher's professional experiences—and the findings in the literature—spurred interest in approaches, practices, and programs that assist boys in achieving academic and social success. This research was done in a co-educational setting because "we do not live in a gender-segregated world" (Kommer, 2006, p. 248) and because both sexes can learn from each other.

This literature review examines the need for specific learning strategies for male students, with attention to their brain development. Pedagogy should be done in such a way that it supports boys' cognitive growth. Additionally, the literature review contains details of brain development that highlight the necessity of appropriate curriculum design, how students from poor backgrounds can be engaged, and strategies required for the growth of Latino boys in particular.

Literature Search Methods

Literature reviewed for this study was retrieved through online databases including *Eric*, *EBSCO Host*, *Google Scholar*, *ProQuest*, and the TEA website as well as the Association for Supervision and Curriculum Development (ASCD) online search services. Peer-reviewed educational journals and books were also used in conducting the literature review. Numerous books have been written about educating boys, and these too were used. Boote and Beile's (2005) framework for scholarly literature reviews guided the organization of the literature review.

Criteria for Inclusion and Exclusion of Literature

Empirical research literature was included in this review. Neuroscience research literature was reviewed in order to better understand the male brain. This provided valuable information enabling a better understanding of the types of learning that best suit boys. The choice was made to focus on literature that viewed boys from an asset approach—that is, focusing on the strengths that boys have that they bring to the classroom and what strategies best help them be successful in the classroom, as opposed to focusing on the challenges boys might bring.

Fink (2013) asserted that it is essential to identify and work with the most relevant and current literature sources for every research project. Thus, the first step of background reading and preparation was crucial. The second phase involved working with the title of this dissertation to determine search terms (i.e., terms related to the topic such as: boys, middle school). Peer-reviewed articles published within the last five years as well as current and historical books were reviewed to collect up-to-date and reliable information; the remainder of

the literature was excluded based on year of publication or concerns about a study's design or applicability.

Brain Development of Boys and Girls

Brain development among children has attracted widespread interest (Gurian & Stevens, 2004). Scholars have developed various theories to highlight the role of the brain in determining the performances of all students in a classroom (Egan, 1998). Differences in brain structure determine how boys and girls use their brains during their lives (Fletcher et al., 2015). Scholars have drawn various conclusions from their research on the subject (Miville, 2013). In this case, it is critical to establish that neuroscientists have conducted research to prove that the structure of the brain has a significant effect on learning (Fletcher et al., 2015). Additionally, researchers have indicated that the differences between the performance of boys and girls in the classroom can be attributed to the process of brain development as well as development in general (Gurian & Stevens, 2004). On this basis, some researchers have declared that beginning formal education among boys at too early an age may be counterproductive (Egan, 1998). The right side of the brain develops faster than the left in all individuals. However, the development of the latter has been shown to take longer in boys than in girls.

Professional educators should consider the differences between males and females from a young age (Miville, 2013). The first gendered difference identified in the brain is in the corpus callosum. This structure, which links the left and right hemispheres of the brain, is larger in females than in males (Gurian & Stevens, 2004). The left side of the cortex is known to grow at a relatively slower rate among males compared to females (Egan, 1998). The latter is the reason that boys develop formal language and communication skills at a slower rate than girls (Miville, 2013).

The right side of the brain, which is primarily responsible for emotions, is more active among females than among males (Egan, 1998). In addition, the right side of the brain passes information to the left side that is linguistically productive. This ability to pass information between hemispheres is responsible for the higher level of emotions among women (Gurian & Stevens, 2004). As a result, females can more easily integrate emotions with their speech. The same process applies to adult women and their thought processes (Fletcher et al., 2015). The physical differences between the brains are responsible for the ease with which the females can talk about their emotions. Males, on the other hand, tend to shy away from showing their feelings to others (Fletcher et al., 2015).

A larger percentage of the brain is dedicated to spatial-engineering functioning in boys than in girls, while only half of the cortical area performs verbal-emotive roles. However, brain imaging studies indicate that women utilize the most advanced sections of the brain such as the cerebral cortex (Miller & Halpern, 2014). Moreover, teenage girls display high levels of negative emotions in a larger portion of their brain; they can more fully explain the reasons for their sadness because of the incorporation of a larger part of the cerebral cortex. At the same age, the locus of teenage boys' negative emotion is still dormant, remaining in the amygdala (Ramirez, Gunderson, Levine, & Beilock, 2013). Thus, it is difficult for teenage boys to explain their feelings.

Furthermore, the spatial functioning system in the brain of male students causes them to show more concern about moving objects through the air, on the ground, or by other means. Boys are therefore more likely than girls to engage in activities considered to be risky; they are daring and more likely to engage in activities that may have detrimental long-term consequences (Orr et al., 2011). This may help to explain the high percentage of boys who engage in

discipline-related offenses at school from a young age. Violating the law is exciting to them and they find it difficult to resist the feelings invoked by such actions.

Researchers have found that boys have relatively lower levels of serotonin and oxytocin than girls of the same age and thus are more likely to be impulsive in the decision-making process in comparison to girls (Gurian & Stevens, 2004). This manifests, for instance, as a lower likelihood of sitting still and engaging others in conversation compared to girls. This may also be due to the amount of blood flow to the brain (James, 2015). Boys tend to have less blood flow in their brains, which requires their brains to structure and compartmentalize the learning process where as girls are able to multitask better than boys as well as have less attention span problems (Gurian & Stevens, 2004). Additionally, studies have indicated that the male brain is more likely than the female brain to go into a state of rest (Miville, 2013). From this state, it can renew, reorient, and recharge itself before beginning another task (Fletcher et al., 2015).

The same process is less present in the brains of female learners; they can accomplish their duties without needing to rest their brains (Egan, 1998). In a classroom setting, this means that boys are more likely to quit listening and stop concentrating, depending on the number of words used by the teacher. In instances where the learning process involves multiple sentences, male students may even fall asleep (Gurian & Stevens, 2004).

The nature of the differences between the sexes is evident in how they each use their brains to accomplish tasks efficiently (Fletcher et al., 2015). In situations where girls are required to perform difficult tasks, they have the ability to integrate both sides of the brain into the decision-making process (Egan, 1998). However, boys use the side of the brain that is most suited to providing solutions according to the prevailing situation. Males can make conclusive decisions because only the most appropriate side of the brain is involved in the decision-making

process (Gurian & Stevens, 2004). In contrast, girls are often unable to provide a single decision in complex matters because of the involvement of both sides of their brains (Fletcher et al., 2015).

Boy's minds are often more suited to symbols, visuals, and the use of abstractions, and thus boys tend to achieve higher grades in math and physics compared to girls (Orr et al., 2011). Boys will also prefer video games due to the visual features that allow movement and destruction of the status quo.

Neuroscience researchers have found differences in the brains of girls and boys due to age, sex, and even poverty. However, one thing is certain regardless of these differences: "all learning involves the brain" (Jensen, 2005, p. 6). As educators, we can improve practices when we use approaches that align best with the function of the brain (Jensen, 2005; Kagan, 2014).

Strategies Leading to Boys' Success in School

Despite significant attention being given to the performance of girls, strategies have emerged that have proven beneficial for boys. Educators in the United States and overseas have developed policies with the sole purpose of ensuring that education levels are improved and meet required levels (Edwards-Omolewa, 2007). Identifying specific needs of students is one of the most important steps in ensuring that learners feel comfortable in the school environment (Armstrong, 2012). The development of such frameworks requires the input of various stakeholders within the education sphere, including parents, teachers, administrators, and policy makers.

According to James (2015), various mechanisms can be used to ensure that learning processes are efficient for boys. These methods include using teaching styles geared to boys, adopting single-sex classes, introducing authoritarian disciplinary strategies, and employing

minimally interventionist approaches. Whichever approach is applied, the teaching process should be compelling enough that boys will use, for example, fine motor skills, drama, and reflection sessions during which they can ask questions (Alderman, 2013). James (2015) also argued that boys should be given large learning spaces to enable them to move freely during lessons as this is another way of stimulating increased blood flow to the brain.

As boys' brains work more efficiently when teaching is structured and compartmentalized, efforts should be made to ensure lessons are kinesthetic and experimental to achieve the desired curriculum objectives (Keddie, 2009). Compartmentalization should take into account the use of graphic organizers because boys are more likely to react positively to the use of appropriate graphics in the learning process. Teachers and parents should devise ways of ensuring that verbal instructions are kept as brief as possible; layered instructions are not useful with boys, and if they are necessary, steps should be numbered to enhance the learning process (Hinshaw & Scheffler, 2014).

What are some of the strategies found to be successful with boys? Various strategies have proven beneficial for boys and policies usually ensure that one of these strategies are utilized for their academic growth (Legewie & DiPrete, 2012). Reichert, Hawley, and Tyre (2013) observed that parents play a major role in facilitating the success of their sons at school by focusing on creating an imaginative environment that ensures they can take full advantage of the available resources. One strategy identified as having a significant impact on boys is allowing them to play. Boys should be given extensive time for physical activities rather than letting them stay idle for long periods (Legewie & DiPrete, 2012). Parents should also provide an atmosphere that provides boys with have enough time for indoor or outdoor games whenever they are away from school to facilitate their learning (Reichert et al., 2013).

Teachers also have a role to play in the success of boys in schools; they are trained to do so by designing participatory course outlines with objectives, assessments, and practices that reinforce each other. As most boys are more effective learners when they are involved in various forms of activities, it is necessary to create active content that is more likely to facilitate learning (Schargel & Smink, 2014). In this case, the learning environment should create scenarios that allow boys to use their bodies to accomplish tasks efficiently. They are more likely to learn when activities involve a hands-on approach that allows them to learn by touching, climbing on things, building structures, and moving objects around within the learning environment to keep them focused (Van Hoorn, Nourot, Scales, & Alward, 2014). Although this strategy is more effective among learners in kindergarten than for older children, it is an important interface for learning that should not be minimized.

Furthermore, male children should be given opportunities to read about and listen to topics that interest them. Teachers and parents/guardians need to know children's interests as well as knowing ways to motivate them by using what they love (James, 2015). Allowing male students to pursue their interests will lead to improved performance over time, as it encourages them to develop their talents.

Another strategy involves allowing the boys to have a level of control over the learning process. This gives them a feeling of ownership and they become involved in the classroom through questions and answers. Programs that engage students with their mentors are reported to be one of the best study designs for boys, often leading to positive outcomes (Gorski, 2013). Such involvement encourages boys to feel like they are a part of the lessons, and they respond by meeting class deadlines, completing homework, and achieving higher scores on assessments. Research conducted by Hinshaw and Scheffler (2014) on students' performance in the absence

of engagement versus when they are actively participating indicated that mentor-student collaborative strategies give the results noted above. The boys ask questions and provide answers due to the confidence acquired from their involvement. The main source of motivation among boys was the perceived improvement in their classwork. Most students conceded that they were unable to focus on a specific subject when they felt they were not making progress (Hinshaw & Scheffler, 2014).

To establish the importance of control on boys' classroom performance, Younger, Warrington and McLellan (2005) conducted a study. The research was divided into four sections, each of which the male learners was required to complete. The first part involved an interview between the boys and their mentors At this point, each student was asked to identify their best and worst areas in class. They were also required to establish the reasons for their success or failure in specific areas. Finally, the students were asked to identify the factors that they felt affected their performance.

The second part of the research required the student and mentor to work together and develop a strategy for improving performance in the areas in which they posted poor results. This plan was to be implemented to facilitate change among the learners. The researchers believed that this would lead to positive outcomes. Some of the strategies that were developed included meeting class deadlines, completing homework, and developing a better understanding of essays.

After selecting the most appropriate strategy for the class, the students proceeded to the third stage of the study. Lastly, they were given an opportunity to discuss the success or failure of the strategy. This research was tailored to promote the idea that the boys were responsible for

their own success or failure in the classroom. After collecting the data, various conclusions were drawn.

Almost all the boys involved in the study indicated that the strategy they developed with their mentors was successful. In addition, they improved their performance. The enhanced outcomes could be attributed to the ability of the learners to meet their deadlines. The new strategies provided the students with better techniques to facilitate the learning process and enable them to achieve their objectives within a given time.

Further, the students concluded that most of the causes of failure were beyond their control. They either blamed the teacher, the subject, the exams, or a combination as the primary reasons for their inability to perform well. More than three-quarters of the boys also indicated that their academic potential was not reflected in the results of the assessments and exams that had been given by the teachers. There was a feeling among the students that they were more likely to perform better when they had a better attitude towards their subjects.

Another concept related to the development of individual strategies is the process of ownership in the stages of learning. Most boys found selecting a specific strategy to be effective because it enabled them to have control of their learning. This led to changes in attitudes and improved performance by the students. Therefore, when students are allowed to develop a learning strategy of choice, they are more likely to experience improved performance.

The results obtained in the study conducted by Younger, Warrington, and McLellan (2005) confirmed that a significant culture of achievement was evident among most of the learners. A large percentage of the boys stated that they had been pleased to be selected for the project. They were also happy that the research project had helped them improve their performance in their class. Study participants also showed notable improvements in their

performance outside of the school context in the form of discipline and behavior compared to non-participants.

One of the factors that led to behavioral changes among the boys was the emphasis on work rather than behaviors. All the participants appreciated the opportunity they had been given to have a one-on-one discussion with their mentors. This process had highlighted the impact of individual approaches on improving their performance. The mentoring process had helped the boys establish a positive attitude towards class work and helped them identify the factors that they felt contributed to their success or failure within the classroom. A third of the students involved in the study attributed their success or failure in the classroom to their own attitudes. These attitudes were caused by external factors in the learning environment. The remaining two-thirds of the students indicated that their failures or success in the classroom were directly influenced by external factors beyond their control.

The influence of teachers is also highlighted in this case (Younger, Warrington & McLellan, 2005). Success among the boys depended on the efforts made by the teachers to ensure their students attained the required levels of performance. When analyzing the role of teachers in the success of boys, it is important to include the concept of socialization in the classroom. This is more noticeable in subjects such as mathematics. The level of socialization between boys and girls during the teaching of technical subjects such as math, physics, and chemistry should be initiated by the teachers through the tutor-learner interactions (Hamblet & Council for Exceptional Children, 2011). However, such relationships are influenced by the beliefs and expectations teachers hold about their students. Additionally, teachers' attitudes towards particular students regardless of their grades are also likely to have a major effect on the expected outcomes.

When analyzing the nature of teacher-student interactions, experts examined the level of difficulty of mathematics questions provided by the teacher (Kirby, 2012). In addition, the interactions also explained the level of attention given to the students by their teachers during their lessons. Other factors included in the teacher-learner relationships relate to the teachers' handling of feedback given to the male students—whether praise or critique. Finally, the study analyzed the interpretation of the replies given by teachers and the likelihood of students requesting help from their tutors on specific topics (Reichert et al., 2013).

Another factor that has been shown to have a significant influence on the classroom performance of boys is the teacher's assumptions about students. Teachers are likely to have differing explanations for the performance of boys versus girls. For instance, teachers considered the success of boys in more complex subjects to relate more to ability rather than to effort (Reichert et al., 2013). Moreover, the teachers believed that additional effort by the boys would lead to improved outcomes.

An additional strategy is single-sex education, which is the process of teaching boys and girls in separate classrooms with the aim of instilling self-confidence in them and treating them differently due to the differences in their brains (Halpern et al., 2011). Pahlke, Hyde, and Allison (2014) argued that single-sex classrooms provide an opportunity for male students to be taught in a style that is in accord with their brain development. Boys tend to have compartmentalized brain activity and, as a result, are likely to be more successful when they can focus on a particular activity for a considerable period before a new task is introduced. Moreover, because the part of the brain that processes language develops at a slower rate in boys than in girls, boys will excel in classrooms that use diagrams and visual aids.

Single-sex classes also ensure that boys' sensitivity is nurtured. Mixed classroom teachers are usually focused on ensuring that the feelings of the girls are not affected and the boys feel an abandonment that considerably affects their academics. However, in a classroom that contains only boys, boys have an opportunity to express themselves (Halpern et al., 2011). Talking-while-walking conversations are part of these classrooms, showing that this type of environment is to the boys' advantage.

Another effective teaching strategy is cooperative learning, in which students are divided into small teams according to their abilities. Each group uses various learning activities to improve their capabilities and gain an understanding of the subject (Kirby, 2012). All members of each team are required to make a contribution to the education program to ensure that an atmosphere of achievement is created. Boys can derive a lot of benefits from this form of learning as it provides them with several advantages. The first is that involvement in discussions leads to higher levels of thinking. Second, student interactions are enhanced because students become more familiar with one another; the rate of student retention is also higher (Marrs & Sigler, 2012). Middle school students who have problems with truancy are encouraged to attend school to develop a connection to the learning environment.

As cooperative learning encourages students to be active in the classroom, male learners will develop both oral communication and social interaction skills, which will certainly be useful to them beyond the classroom (Gorski, 2013). Students are also given responsibility for their education and will therefore initiate learning activities to improve their understanding of the subjects. This learning strategy also allows for use of alternative student assessment techniques (James, 2015), which can help in identifying challenges facing learners so they can be dealt with appropriately.

Good pedagogy for boys involves developing research-based knowledge about gender-based education. Again, it is imperative to connect curriculum and assessment practices to the daily lives of young males alongside maintaining a focus on building their higher-order and analytic thinking skills. Finally, the creation of safe classrooms in which gender, ethnicity, and cultural differences are appreciated and incorporated into the syllabus is not an option if the world seeks to adequately prepare boys educationally.

Middle School Curriculum That Contributes to the Success of Boys

Boys have traditionally lagged behind girls in tasks that involve reading and reading comprehension (MacDonald, 2005). There are various reasons boys underperform in reading compared to girls. One reason is that boys take longer to develop literacy skills. In addition, there are differences in reading material as well as instructional approaches for boys versus girls (MacDonald, 2005). In most instances, boys are in more need of "teacher time" than girls (Kirby, 2012). Due to the limited time in the classroom, it becomes difficult for boys to have one-on-one time with teachers when they reach middle school. The level of progress made by boys is therefore likely to be lower compare to girls.

The lack of success among boys has also been attributed to the lack of reading culture among them. Changes in attitude are also responsible for the different levels of performance in the two genders (Grigorenko, 2013). When boys reach adolescence, most fail to apply what they read in class (MacDonald, 2005). They also fail to see connections between real scenarios and their reading materials. According to boys, the literature in language arts classes consists of stories rather than providing valuable lessons to readers. Some boys may therefore stop reading due to the belief that there is no direct benefit associated with it.

As adolescents, boys continue to develop negative attitudes towards reading and are therefore likely to stop considering themselves to be readers. It is at this stage that reading is regarded as a feminine activity due to gender identification choices. If boys believe that reading is a feminine activity, they may avoid it as a means of demonstrating their masculinity. Despite the problems affecting boys in middle schools, their performance can be significantly improved by ensuring that appropriate strategies are developed. Both parents and teachers have a significant role in securing improved performance among boys (MacDonald, 2005).

One way to counter the aversion to reading involves using texts that are easily understood by boys and that they are likely to read. Even though research has indicated that boys are more likely to perform poorly than girls in most subjects, there are areas where the opposite is true (Harding, 2010). Boys frequently score more highly than girls on sections of tests containing informational texts. Thus, teachers should provide boys with texts from which they are more likely to connect with something concrete. Such texts can be obtained, for instance, from magazine and newspaper articles and may include books about topics that are likely to attract the interests of boys, such as sports and instructional manuals. A research study conducted by Cleveland (2011) indicated that boys are not only interested in informational texts, but they also love graphic novels and comic books. Examples of the latter include humorous stories and stories featuring male protagonists. By offering such texts to boys, there is a high likelihood that their skills will improve substantially (Cleveland, 2011).

Another strategy that can be utilized relates to the use of shorter texts (Cleveland, 2011). Most boys consider reading longer texts to be a waste of time (Harding, 2010). For the learning process to be more effective, learners should be provided with summarized texts that allow them to easily identify the most important elements (Cleveland, 2011). Shortened reading material

also give students the opportunity to read for a relatively shorter duration, thereby ensuring that they have grasped some of the most important elements of the topic (Harding, 2010).

The learning process should also allow boys to actively respond to texts (Belgrave & Brevard, 2016. In this case, the learning process should be tailored such that boys have sufficient time to understand the most important concept of the lesson before giving their answers in the classroom. This process requires students to read the text and discuss it among themselves before giving their answers (Cleveland, 2011). However, it has also been established that boys do not like discussing literature, as would be required in an English language arts class, because they are more inclined towards physical tasks. Therefore, teachers have the responsibility of providing boys with an opportunity to respond to what they have read. This would ensure that they are conversant with the topic (Belgrave & Brevard, 2016). Some of the ways of increasing performance include creating visual and graphic presentations of the activities in class (Cleveland, 2011). In some instances, the learning process could involve acting out some sections of the reading material as a means of enhancing boys' understanding (Belgrave & Brevard, 2016).

Parents and teachers should also assist boys to identify their interest in given tasks. The learning material should be based on identified individual needs and preferences of learners (Cleveland, 2011).

Administrative Strategies That Contribute to the Success of Boys

Principals of middle schools serve in a leadership role, and they must recognize the adversities they face and the importance of acquiring practical skills that are needed to tackle such challenges (Hall, Hustyi, Hammond, Hirt, & Reiss, 2014). One of the main administrative strategies that is effective for supporting the success of middle school boys is establishing a

vision for academic excellence in which everyone is committed to higher standards of success (Lapan et al., 2016). The academic performance gap between girls and boys in middle school needs to be narrowed, which can be achieved when school administrators spell out rigorous but attainable goals and set high standards for the students (Potter, 2015). Boys need a bit of a push in the right direction by administrators, unlike girls, who tend to more easily follow regulations without as much need for follow-up (Piechura-Couture, Heins, & Tichenor, 2013). Schools that have high expectations for every student are in a better position to close the achievement gap between girls and boys and to increase the average performance of every child. Therefore, the development of a shared vision focusing on standards and performance among all children is an important administrative leadership strategy, especially for boys because it helps push them toward attaining the stated goals and succeeding in their careers (Kyriakides, Creemers, Papastylianou, & Papadatou-Pastou, 2014).

Creation of a climate that is favorable for education within the school is important considering that such a climate not only helps boys put education at the center of all their activities but also ensures that the entire middle school focuses on educational activities. Administrators should focus on establishing a perception of the school community that focuses on attributes like respect for every individual within the school and involvement in school activities (Bristol, 2015). Both teachers and parents need to be involved in mentoring of students because parents can assist boys in development of skills. A school environment that exhibits strong interaction between teachers and parents aids the mental development of male students (Grossman, Tracy, Charmaraman, Ceder, & Erkut, 2014). Therefore, in addition to involving counsellors to mentor boys and assist in their development, teachers and parents should also participate in this process, considering that middle school boys are in an adolescent stage that

requires great guidance. The favorable environment facilitated by every stakeholder should also encourage students to develop leadership attributes. Development of effective leadership strategies helps to mold students into future leaders and is related to improved performance in mathematics (Heemskerk, Kuiper, & Meijer, 2014). Effective leadership strategies that show students the importance of being a leader push male students to work harder to attain their positions in society in the future (Campos, 2013). Additionally, a friendly classroom environment encourages learning and motivates leadership among students, which can be explained through the greater access to communal knowledge that is entrenched in the entire school community, from teachers to parents to administrators. An effective administrator should impart leadership characteristics to their faculty, who in turn must emphasize the need for students to exercise leadership skills. Boys perceive themselves as having greater responsibilities than girls, thus emphasizing their roles as leaders and encouraging them to concentrate on their studies in order to succeed and become better leaders (Haridarshan, 2015).

Another administrative strategy for middle schools that can work to bridge the gap in performance between girls and boys is emphasis on real-world training and linking activities to real-world experiences (Hall et al., 2014). Administration that values the significance of field experiences will help male students develop practical skills by exposing them to real-world applications rather than solely focusing on theory in the classroom. Male pupils are known to be physically active, and thus they need to take part in activities that are more engaging than sitting in a classroom for the better part of the day (Lilja, 2013). Such activities involve a lot of hands-on participation where students are mentored to value the practical aspects of learning under the professional supervision of teachers. This type of administrative leadership involves a lot of negotiation, as members of the school community are allowed to contribute their views on

various aspects of learning, thus developing a participatory culture within the school (Reichert, & Hawley, 2013).

Boys Living in Poverty

To close the educational gaps of all students, many states have explored comprehensive school reforms intended to improve the performance of the lowest-ranking schools (Gorski, 2013).

Classroom Strategies

The literature proposed many classroom strategies that can be used to counter the effects of low income on students, including using engaging pedagogy, involving family, incorporating art, integrating movement, focusing on student and family strengths, analyzing materials for bias, promoting literacy enjoyment, and reaching out to families early and often (Morgan & Raines, 2011).

Express high expectations through higher-order, engaging pedagogies. At-risk students who attend schools that blend rigorous curricula with strong learner-centered classrooms achieve at higher levels than students who receive lower-order instructions. The latter group is more likely to drop out of school (Younger, Warrington & McLellan, 2005). Similarly, low-income boys (and girls) learn most efficiently in schools where pedagogy is driven by high academic standards for all students, that is, when standards are not lowered based on socio-economic level. They do better in classrooms that encourage dialogue, collaboration, and inquiry-based pedagogies (Roseberry-McKibbin, 2013).

Incorporate art into instruction. Douglas and Jaquith (2015) argued that low-income schools exclude arts activities from their curricula with the aim of creating more time for students' engagement in reading, math, and writing. However, it is evident that any student who

actively participates in theater, art, and music is more likely to improve academically through those engagements and is less likely to drop out because their family income does not allow them to participate in the arts while at home (Sallis, 2014). Schools can partner with local artists and musicians to help build confidence among students through live performances by the artists and together with the students. Learners then perceive the arts in discipline-specific ways.

Enhance family involvement. Schools must involve parents and guardians by designing flexible programs that are accessible to those who have multiple jobs, depend on public transportation, lack child care funds, or have evening jobs (Sallis, 2014).

Focus intently on student and family strengths. When educators adopt a negative view of the students they teach, the performance of those students declines. However, learners are motivated to improve academically when the focus is on their strengths. Similarly, teachers benefit from such positive perceptions; a 2007 study by Robinson assessing 400 teachers in low-income schools revealed that those who resisted negative views of their students remained happier and more content with their jobs (Morgan & Raines, 2011).

Incorporate movement into instruction. Low-income students are engaging in less physical activity due to the lack of recreational amenities and green space in financially challenged communities and the high costs associated with traditional school-based sports (Douglas & Jaquith, 2015). Physical education is a necessary part of the curriculum, as it enhances fitness and physically healthy learners fare better in schools and are more likely to retain a good state of well-being in adulthood (Douglas & Jaquith, 2015). Instilling movement into learning is a sure way of mitigating the problems associated with low levels of physical activity.

Promote literacy enjoyment. Literacy proficiency is one of the least expensive ways out of poverty. Accordingly, literacy instruction should not focus solely on the mechanics of reading and should not encourage practices that cause students to have negative associations with literature (Wolfensberger, 2012). Rather, literacy instruction should promote reading as a pleasure.

Analyze materials for class bias. Many picture books and other reading materials depict lower-income families in stereotypical ways. Teachers can utilize the many available tools such as the checklist of the National Association for English Working Party on Social Class and English Teaching to identify and eliminate these biases (Younger et al., 2011). Once they are uncovered, students should be involved in the analysis to help all students feel cared for, which leads to improved academic growth.

Reach out to families early and often. Importantly, communication with parents and guardians must not be all negative (such as discipline); it must also include positive communications, for instance, when a student excels (Morgan & Raines, 2011). With an understanding of income inequality, schools can spearhead child development with parents by creating an equitable classroom atmosphere for children from all cultures.

Nurture relationships. The future of these children is more uncertain than it is for children from higher socioeconomic backgrounds. This situation is likely to affect student performance in the classroom (Sáenz et al., 2013). As relationships are important to the success of students from any environment, children who do not live with their parents or who lack parental support are more likely to have chaotic experiences and may even drop out of school if they are not properly supported.

Higher-Level Strategies

As the need for class equity grows, bigger battles to attain that objective must be waged, including providing health services in learning institutions, nurturing relationships with relevant stakeholders, reducing class sizes, and advocating for universal preschools (Douglas & Jaquith, 2015).

Increase health and nutritional services in schools. Low-income families are unlikely to be able to cover medical expenses such as eye-sight screening and expenses associated with the health problems like asthma that are more prevalent among low-income groups. This calls for the need to keep nurses in low-income schools to minimize the chances of students dropping out of school due to health-related issues (Sáenz & Ponjuan, 2011). Arguably, all health-related matters have a significant effect on cognition (Sallis, 2014).

Often, low-income families cannot afford balanced, nutritious diets. Students from such families frequently skip breakfast, eat less, and consume low-nutrition foods—all of which are detrimental to students' health (Morgan & Raines, 2011). Schools should introduce nutrition programs to offset these problems and should encourage students to learn about nutrition and eat at school**.** Susan Neuman's 2009 study revealed that all forms of educational interventions regarding low-income families, if based on coordinated efforts among educational, health, and social services, work in enhancing learning (Sallis, 2014).

Reduce class size. Research has shown that class size matters; it is easier for a teacher to attend to a small group of students so that each learner is accorded sufficient attention to improve their literacy and numeracy skills (Younger et al., 2011).

Implement universal preschool. Disparities in access to educational interventions in early childhood developmental stages follow a child into adulthood. Therefore, all institutions serving low-income families must seek to support development of the whole child (Morgan &

Raines, 2011). With proper support, students can develop cognitive skills that will benefit them in the future.

Latino Boys

The future of America's Latino male student population is in peril. Although the number of Latino men attending college and attaining degrees has risen over time, their representation is in decline relative to their female peers (Sáenz & Ponjuan, 2011). This has untold implications for the future economic success of the United States, as well as the well-being of the growing Latino community. Therefore, what special considerations should be in place for Latino boys to achieve academic success?

To understand the urgency of the gender gap in education among Latinos, a review of broader demographics from census data is necessary. Sáenz et al. (2013) considered the results from the 2003 census, which indicated that the Latino community had become the country's largest ethnic minority, edging past the African-American population. This was a historic shift in demographics. More recent census data from 2010 showed that the Hispanic population was 50.5 million, or 16.3% of Americans, representing an increase of 45% over the preceding decade (Kuykendall, 2012). It is apparent that in the coming years, today's young Latino population will be the main labor force in numerous regions of the country. Improving their educational success, especially the success of Latino boys, is vital for ensuring America's future prosperity.

However, educational research provides scant evidence of the issues that Latino men face while navigating the transitions that follow secondary school. Some are related to lower family incomes and lower levels of parental education. Regardless, it has been suggested that proper early childhood preparation can help to prevent these challenges from following them into later stages of their lives (Sáenz & Ponjuan, 2011). Thus, the necessity of adopting appropriate

engagement techniques in the early childhood, elementary, and secondary educations of Latino boys is clear.

Disparities in enrollment rates between girls and boys start to show in early childhood among Latinos. In 2009, for instance, 44.4% of female Latinos were enrolled in early childhood programs compared to 39.4% of males of the same age (Sáenz & Ponjuan, 2013). Further, evidence indicates that boys, even after enrollment, are in education systems that do not acknowledge the potential mismatch of expectations that exists between male and female populations with regard to the curriculum. Latino males are overrepresented in referrals to juvenile agencies, high school drop-out rates, and special education tracks. They are frequently involved in disciplinary cases that call for suspension and/or expulsion from schools. Despite the problems facing this group, there are opportunities to improve their academic outcomes through a national, state, and regional commitment to invest in their education at the outset (Parkay, Anctil, & Hass, 2014).

Outreach and Communication

A streamlined method of communication and participation in the school environment can help reverse negative trends in education among Latino males. Strategies here work to engage parents, guardians, and other stakeholders and aim to keep every participant informed about progress of students and programs (Sáenz & Ponjuan, 2011).

By using appropriate communication policies and practice recommendations, it is possible to build confidence among Latino males—especially if the evaluation outcomes are shared with policymakers, potential donors, and practitioners. Disseminating plans should include the use of the internet (especially social media), print, and television. This would ensure that strategies leading to successful course models for Latino boys, as well as the necessity of

such initiatives, are shared across the country and adopted elsewhere (Roseberry-McKibbin, 2013).

Support for Latino Boys' Success

First, Latino boys must be provided with emotional support. They must be cared for and respected through mentoring, individual counseling, and peer assistance. Instrumental support requires developing workshops that boost their literacy along with their study and time-management skills. Additionally, older Latino boys will need informational support to guide their decision-making about academic transitions and career choices. Feedback from assessments would contribute to those decisions (i.e., appraisal support). Finally, structural support would aid in improving the culture and climate of schools and creating a stress-free atmosphere in which Latino boys could participate in activities promoting intellectual growth (Sáenz et al., 2013).

Along with innovative curricula, educators must formulate effective policies and adopt promising activities to encourage Latino boys in their successful educational growth, which could yield a pool of skilled and dependable workers for the future (Sáenz et al., 2013). It is thus necessary for all institutions to engage families and community in shaping the future of Latino boys. These two groups play a tremendous role in shaping lives (Roseberry-McKibbin, 2013). Consequently, learning institutions should develop practices that allow and encourage family and community participation in the academic experience (Sáenz & Ponjuan, 2011). They create a school-going culture in the young that must be encouraged.

Both K12 schools and higher education institutions should conduct outreach and offer services to the community and to students' family members. Educational and political leaders must consider economic forces that often compel young Latinos to drop out. Engaging the

community and families in creating a culture of success early in boys' lives will engrain the essential skills, support, knowledge, and behaviors required for Latino boys to have opportunities for further learning and acquire expertise in various sectors of the nation's economy (Sáenz & Ponjuan, 2011).

Chapter Summary

In addressing the issue of gender and academic performance, academic research has played an important role in scrutinizing the undertheorized ways masculinity is supported or suppressed in schools. Nonetheless, strategies that aim to increase the number of male role models and better support male students through proper learning pedagogy have taken center stage in the current education setting.

Regarding brain development, the major physical difference between males and females is in the corpus callosum, which joins the left and right hemispheres of the brain; the corpus callosum tends to be better developed in females, while boys experience slower growth of the left hemisphere than girls. These two factors explain why females generally develop formal language and communication skills faster than males and why boys need more time and exposure to acquire literacy skills. Boys should therefore be offered a unique curriculum.

Although some such strategies to address physical differences are in place, poverty is another area of concern as it frequently compels boys to drop out of school. This situation calls for course redesign to include new approaches. There are many classroom strategies that may be exploited, including engaging pedagogy, involving family, incorporating art, integrating movement, emphasizing the strengths of learners and their families, analyzing coursework items to identify and eliminate class bias, promoting literacy enjoyment, and contacting families frequently and in a timely manner.

A particular focus was also directed toward Latino boys. Research has shown that this is a highly vulnerable group in the United States and they may be in peril if education strategies are not revised to enhance their learning and development. Continued examination of this area suggests that through curricula preparation and development, resource growth and sustenance, and outreach and interaction methods, intellectual growth of Latino boys is possible. The provision of emotional, structural, informational, and instrumental support, coupled with the adoption of effective policies that encourage family and community engagement as well as research-based practices, are the cornerstones supporting improved performance among Latino students.

From the literature analysis, it is evident that boys face more challenges than girls in their quest to perform better in school. These challenges can be attributed to both the natural features of the brain and the environments in which students reside. Additionally, students' upbringing influences their performance within the learning process. These factors must be taken into consideration when analyzing the performance of all students.

CHAPTER III

METHODOLOGY

The literature review chapter included discussions of approaches that contribute to the success of boys in school. Previous research also supports the need to continue to investigate ways to promote the success of boys, both academically and socially. In this study, a cross-sectional survey containing both qualitative and quantitative questions was used to examine how six Title I middle schools are helping boys achieve success. According to Corbin and Strauss (2008), "qualitative research allows researchers to get at the inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables" (p. 12). The goals of this study were to answer the research questions, collect information about the lived experiences of school faculty, and report any new understandings of practices that promote the academic and social success of boys particularly in the six studied Title I middle schools.

Research Design

A cross-sectional survey design was used to collect data from the identified schools on current practices and programs that are contributing to the success of male students. The survey was administered once at a single point in time to provide a snapshot of current practices and programs (Gay, Mills, & Airasian, 2009). The survey consisted of both structured (closed-ended) and unstructured (open-ended) items. Descriptive statistics were used to report the data from responses to closed-ended questions. The Statistical Package for the Social Sciences (SPSS), Excel, and SurveyMonkey were used to manage statistical data and analyze responses to the closed-ended questions. The constant comparative method was used to analyze responses to the open-ended questions. Glaser and Strauss (1967) suggested using this method when applying

grounded theory because "it is designed to allow, with discipline, for some of the vagueness and flexibility that aid the creative generation of theory" (p. 103). The responses to open-ended questions were read and compared to the next set of responses, and so forth. Comparing response with response allowed the "researcher to differentiate one category/theme from another and identify properties and dimensions specific to the category/theme" (Corbin & Strauss, 2008, p. 73).

Merriam (2009) referenced the suggestion of Corbin and Strauss (2008) to incorporate three phases of coding (open, axial, and selective) in developing a grounded theory. The analysis of the open-ended responses started with open coding (Corbin & Strauss, 2008; Glaser & Strauss, 1967; Merriam, 2009). As the responses were read for the first time, the text was marked with notations identifying data that might be useful in allowing the researcher to be open to any possibility (Merriam, 2009, p. 178). NVivo software was used as a tool to code and categorize the large amount of data from the narrative, open-ended survey responses. Survey responses were examined for both differences and similarities within the data and grouped accordingly; a name was established for each grouping, and a category was created. This process of grouping is referred to as axial coding (Merriam, 2009). Finally, a process of *selective coding,* which entailed refining the categories to one core category (Merriam, 2009), was undertaken and a theory grounded in the data was developed.

Research Site and Participants

Six middle schools, encompassing grades six, seven, and eight, were included in the study. The schools are located throughout Texas and are all within large school districts. Principals, assistant principals, instructional coaches, and teachers in all subject areas and in all three grades were surveyed.

The student population and demographics at each of the campuses are given below:

- Middle School 1: 807 total students; Hispanic 86%; White 7%; Black 5%; two or more races 1%; Asian 1%; Hawaiian Native/Pacific Islander 1%; American Indian/Alaska Native <1%; 81% students from low-income families; 49% females; 51% males;
- Middle School 2: 671 total students; Hispanic 90%; White 7%; Asian 1%; Black 1%; two or more races 1%; American Indian/Alaska Native <1%; Hawaiian Native/Pacific Islander <1%; 75% students from low-income families; 51% females; 49% males;
- Middle School 3: 735 total students; Hispanic 96%; White 3%; Black 1%; two or more races <1%; Hawaiian Native/Pacific Islander <1%; American Indian/Alaska Native <1%; Asian <1%; 91% students from low-income families; 51% females; 49% males;
- Middle School 4: 716 total students; White 65%; Hispanic 22%; Black 6%; Asian 3%; two or more races 3%; American Indian/Alaska Native 1%; Hawaiian Native/Pacific Islander <1%; 34% students from low-income families; 50% females; 50% males;
- Middle School 5: 561 total students; Black 58%; Hispanic 40%; White 1%; two or more races 1%; Asian <1%; American Indian/Alaska Native <1%; Hawaiian Native/Pacific Islander <1%; 85% students from low-income families; 46% females; 54% males; and
- Middle School 6: 925 total students; Hispanic 52%; Black 30%; White 16%; two or more races 2%; Asian 1%; American Indian/Alaska Native <1%; Hawaiian Native/Pacific Islander <1%; 79% students from low-income families; 48% females; and 52% males.

The overall statistics for the State of Texas for grades six, seven, and eight (TEA, 2018) are as follows: Hispanic 52%; Black 12.5%; White 29%; two or more races 2.1%; Asian 1%; American Indian/Alaska Native <1%; Hawaiian Native/Pacific Islander <1%; and 58% students from low-income families.

Selection of Research Sites

Because this studied aimed to explore effective practices for supporting male students, schools that exhibited success with male students were selected for inclusion in the research. Success was measured based on the performance ratings of male students on the Texas 2017 STAAR. The specific criteria used in selecting the schools were as follows: (a) the school needed to be a middle school containing all three grade levels to which the STAAR is administered (grades six, seven, and eight); (b) the school needed to have a similar number of male students and female students taking the STAAR assessment; (c) the percentage of males achieving 'meets grade level' on the STAAR had to be equal to or greater than that of females in all testing areas for the grade level; and (d) the percentage of males achieving 'meets grade level' on the STAAR had to be equal to or greater than that of females in all testing areas for at least two of the three grade levels (e.g., 6th grade and 8th grade).

Schools testing fewer than 100 students were excluded to ensure significance in the scoring. Larger schools also offered more teachers at the site, resulting in a larger population to survey. Participants had to be currently employed at one of the identified schools; participants were recruited from all subjects and grade levels within the middle school to ensure a variety of perspectives were represented within each school.

Data Collection

Yin (2009) stated that the strength of research is in data collection because it provides an opportunity to use various sources of evidence. Using mixed methods through closed- and open-ended questions provided extensive data about historical and behavioral issues that were used to confirm findings (Yin, 2009).

Teachers and administrators from the six middle schools were contacted through the school district email published on each school's website using SurveyMonkey. Participants also answered the survey online using SurveyMonkey. The survey contained Likert-scale questions with responses ranging from "strongly agree" to "strongly disagree." Each potential choice was assigned a numerical value and a mean figure was computed for each of the responses. Participants also had the option of responding to open-ended items that were paired with each Likert-scale question to elaborate on their experiences and beliefs.

Data Analysis

Yin (2009) described data analysis as "examining, categorizing, tabulating, testing, or otherwise recombining evidence to draw empirically based conclusions" (p. 126). As this can be challenging, an analytic strategy was needed (Yin, 2009). Merriam (2009) suggested a "preferred way to analyze data in a qualitative study is to do it simultaneously with data collection" (p. 171). Glaser and Strauss (1967) agreed with Merriam about analyzing data throughout the course of the research study. They explained its importance when developing a grounded theory: "Generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the study" (p. 6). By applying grounded theory to the analysis of data, the researcher generated a theory that was developed from and based on the data (Glaser & Strauss, 1967).

At the completion of data analysis related to research questions 1, 2 and 3, an exploratory analysis was performed. This exploratory analysis then led to adding two additional research questions. The teacher survey collected demographic information about years of teaching experience, grade levels taught, and education level and gender. The distributions of level of education and gender made it valuable to extend the data analysis with regard to these two

categories. A one-way analysis of variance (ANOVA) was used to determine whether there were statistically significant differences in average level of agreement associated with survey questions about approaches promoting boys' success within the school based on the teachers' level of education (bachelor's degree vs. MEd/EdD) or gender (male vs. female). Each question within the teacher survey is unique to approaches implemented in the school; therefore, survey questions were analyzed individually through a one-way ANOVA.

Trustworthiness: Credibility, Validity, and Reliability

Researchers aspire to produce valid and reliable research in an ethical manner. The trustworthiness of the research was significant to the success of this inquiry. Credibility was a key component in ensuring the integrity of the study. Corbin and Strauss (2008) stated:

> The term "credibility" indicates that findings are trustworthy and believable in that they reflect participants', researchers', and readers' experiences with a phenomenon but at the same time the explanation is only one of many "plausible" interpretations possible from data. (p. 302)

Kvale and Brinkmann (2009) referred to validity as "the truth, the correctness, and the strength of a statement" (p. 246). The survey instrument was created and the research questions were framed based on the literature. This process addressed content validity. The survey questions were field tested with a focus group of educators. The dissertation mentor of the researcher, also reviewed the questions. These educators gave feedback on the content and structure of the questions. Questions were modified based on the feedback from the focus group and the dissertation mentor. As a follow-up, SPSS was used to test the structure of the questions.

SPSS, Excel, and SurveyMonkey were used to manage the numerical data and analysis for responses to closed-ended questions. Responses to open-ended questions were interpreted by

the researcher and coded using a constant comparative method with the three types of coding already described to develop a grounded theory. Identifying the theoretical framework of grounded theory from the onset, while also analyzing and identifying personal assumptions, addresses the research biases. Surveying multiple schools gave reliability by enabling an analysis of the consistency of responses. Having multiple middle schools addresses the reliability and validity of the responses.

The researcher sought and obtained approval from the relevant institutional review board (Appendix E). All data will be stored for up to three years after completion of the study.

Ethical Considerations

Validity and reliability rely heavily on the ethics of the researcher (Merriam, 2009). For this reason, high ethical standards should be maintained during all phases of data collection and analysis. Ethical guidelines to consider for this study included informed consent, confidentiality, and role of the researcher (Kvale & Brinkmann, 2009). The consent form (Appendix A) as well as letter of solicitation (Appendix B) outlined the purpose of the study, obtained confirmation of the voluntary participation of participants, and provided assurance to participants that they could withdraw from the study at any point.

Research confidentiality means "that private data identifying the participants will not be disclosed" (Kvale & Brinkmann, 2009, p. 72). Schools included in this study are referred to only by number. School districts are never identified—however, it should be noted that demographic data about the student population is reported.

The openness of qualitative research could have consequences, for instance, participants may share things they might later regret. Throughout the course of the study, the researcher

maintained a heightened level of consciousness to stay true to personal ethics and the ethical issues of qualitative research.

The role of the researcher is “critical to the quality of the scientific knowledge and the soundness of ethical decisions in qualitative inquiry” (Kvale & Brinkmann, 2009, p. 74). Findings shown in Chapter Four were developed with accuracy and represented the study. The data reporting was checked and validated by the dissertation committee to ensure research standards were maintained.

CHAPTER IV

ANALYSIS AND PRESENTATION OF DATA

This chapter reports the results of the research study investigating practices and programs in six Texas co-educational Title I public middle schools that contribute to the success of boys. The study investigated how educators at these schools are engaging boys to achieve success in environments that are more rigorous than average based on administration of STAAR rather than the standardized accountability system. A cross-sectional survey was used to collect data on current practices and programs from the studied schools that are contributing to the success of male students. The survey consisted of both structured (closed-ended) and unstructured (open-ended) items. The results emerging from analysis that answer the research questions that guided this study are presented in this chapter.

Research Questions

The following question guided this study: What approaches can be identified as promoting the success of boys within Title I middle schools located in Texas school districts? The following questions addressed the guiding question:

1. What, if any, practices or programs are implemented by the school to promote the success of boys?
2. Which, if any, of these approaches implemented by the school are identified by research in the literature as contributing to the success of boys?
3. What, if any, of these approaches implemented by the school are not identified by research in the literature, yet appear to contribute to the success of boys?

4. Are there statistically significant differences in average agreement with teacher survey questions pertaining to approaches promoting the success of boys within the school by respondent's level of education (bachelor's degree vs. MEd/EdD)?
5. Are there statistically significant differences in average agreement associated with teacher survey questions pertaining to approaches promoting the success of boys within the school by respondent's gender?

Data Analysis

Quantitative data were analyzed in SPSS using descriptive statistics and qualitative data was coded as described in the previous chapter. The researcher's goal was to describe the participants' subjective experiences and views. The first level of identification of themes occurred during the initial review of each survey responses. Upon receiving the surveys, the researcher read each survey response, analyzed the data for each survey, and then conducted open coding utilizing NVivo software (version 12).

Descriptive Statistics for Teacher and Administrator Characteristics

Teachers. The teacher survey was emailed through SurveyMonkey to 325 teachers at six schools. A total of 48 teachers from the six schools completed the teacher survey (return rate, 14.8%). Table 1 shows the number of teachers from each school that completed the teacher survey.

Table 1

Teacher Survey Response Rate by School

Surveys by School	Administered	Returned	% Returned
Middle School 1	59	9	15.3
Middle School 2	55	6	11.0
Middle School 3	57	15	26.3
Middle School 4	48	5	10.4
Middle School 5	37	5	13.5
Middle School 6	69	8	11.5
Total	325	48	14.8

As shown in Table 2, the majority of teachers were women (n = 32, 68.1%). Fifty percent (n = 24) of the teachers had a graduate degree. Teachers taught a variety of grades and subjects, with the largest percentage of teachers indicating they taught grades 6, 7, or 8 (n = 26, 54.3%).

Table 2

Frequencies and Percentages of Teacher Gender and Educational Attainment Characteristics

Survey question	*N*	%
Gender		
Male	15	31.9
Female	32	68.1
Total	47	100.0
Level of education		
Undergraduate	23	47.9
Graduate/Masters	24	50.0
EdD, PhD, or equivalent	1	2.1
Total	48	100.0

Table 3 shows teachers' years of experience, which ranged from 1 to 43 years with a mean of 13.36 years (*SD* = 9.70 years). Years of experience at the current school ranged from 1 to 22 years with a mean of 8.69 years (*SD* = 6.34). These ranges are statistically large.

Table 3

Descriptive Statistics for Teachers' Years of Experience

Survey question	*N*	Min	Max	*M*	*SD*
Years of experience as a teacher	47	1.00	43.00	13.36	9.70
Years of experience at current school and in what capacities	48	1	22	8.69	6.34

Administrators. The administrator survey was emailed through SurveyMonkey to 23 administrators (principals and assistant principals) at six schools. As Table 4 shows, 8 administrators completed the administrator survey (return rate, 34.8%). Table 4 also shows the number of school administrators from each school that completed the administrator survey.

Table 4

Administrator Survey Response Rate by School

Surveys by school	Administered	Returned	% Returned
Middle School 1	5	1	20.0
Middle School 2	3	0	0
Middle School 3	2	1	50.0
Middle School 4	3	2	66.7
Middle School 5	4	2	50.0
Middle School 6	6	2	33.3
Total	23	8	34.8

As Table 5 shows, the majority of administrators were women (*n* = 5, 62.5%) and all (100%) had a graduate degree.

Table 5

Frequencies and Percentages of Administrator Gender and Educational Attainment Characteristics

Survey question	*N*	%
Gender		
Male	3	37.5
Female	5	62.5
Total	8	100.0
Level of education		
Graduate/Masters	8	100.0

Administrators' years of experience as a teacher ranged from 3 to 21 years with a mean of 10.12 years (*SD* = 6.95 years). Years of experience as an administrator ranged from 1 to 24 years with a mean of 6.50 years (*SD* = 7.44 years). Years of experience at the current school ranged from 1 to 8 years with a mean of 4.25 years (*SD* = 2.76). The years as a teacher and administrator covered wider ranges than years of experience at the current school.

Table 6

Descriptive Statistics for Administrators' Years of Experience

Survey question	*N*	Min	Max	*M*	*SD*
Years of experience as a teacher	8	3.00	21.00	10.12	6.95
Years of experience as an administrator	8	1	24	6.50	7.44
Years of experience at current school	8	1	8	4.25	2.76

Research Question 1

Teacher Results

To address the first research question (What, if any, practices or programs are implemented by the school to promote the success of boys?) teachers were asked the following

question in the teacher survey: *Do you observe academic, social, and behavioral differences between boys and girls*? Quantitative and qualitative responses to open-ended questions were used in reporting results.

Teachers' perceived academic, social, and behavioral differences between boys and girls. The majority of teachers either strongly agreed (*n* = 13, 27.1%) or agreed (*n* = 25, 52.1%) that they observed academic differences between boys and girls. With regard to social differences between boys and girls, the majority of teachers strongly agreed (*n* = 21, 43.8%) or agreed (*n* = 26, 54.2%) that they observed such differences. The majority of teachers either strongly agreed (*n* = 20, 42.6%) or agreed (*n* = 25, 53.2%) that they observed behavioral differences between boys and girls (see Table 7).

Table 7

Frequency and Percentages of Teachers' Responses to Survey Questions Related to Perceived Differences Between Boys and Girls

Survey question	*N*	%
Q.7 Do you observe academic differences between boys and girls?		
Strongly agree	13	27.1
Agree	25	52.1
Disagree	9	18.8
Strongly Disagree	1	2.1
Total	48	100.0
Q.8 Do you observe social differences between boys and girls?		
Strongly agree	21	43.8
Agree	26	54.2
Disagree	1	2.1
Total	48	100.0
Q.9 Do you observe behavioral differences between boys and girls?		

Strongly agree	20	42.6
Agree	25	53.2
Disagree	2	4.3
Total	47	100.0

Four themes were identified in the qualitative data pertaining to perceived differences between boys and girls: (a) there are behavioral differences between boys and girls, (b) there are social differences between boys and girls, (c) there are academic differences between boys and girls, and (d) there are no differences between boys and girls.

Table 8

Frequency of Themes for Teachers' Perceptions of Differences Between Boys and Girls

Theme	Total teacher quotes related to the theme
There are behavioral differences between boys and girls	20
There are social differences between boys and girls	19
There are academic differences between boys and girls	11
There are no differences between boys and girls	7

There are behavioral differences between boys and girls. The most frequently occurring theme regarding differences between boys and girls was behavioral. Teachers perceived boys as less mature than girls and girls as being more focused. For example, teachers indicated the following with regard to maturity and focus: "Most boys are playful, where the girls are more focused on classwork." "Females act mature at a younger age in comparison." "Girls usually are more studious and focused." Teachers also referenced boys' behavior as more aggressive than girls in the following comments: "Boys will act out their aggressions whereas girls will be

more vocal." "Boys have more of a tendency to fight one another over simple issues of getting mad at someone in the moment."

There are social differences between boys and girls. Boys appear to be followers and do not necessarily exhibit depth of reasoning in their friendships, whereas girls connect at a deeper emotional level in their friendships. For example, teachers wrote the following: "Boys seem to look for a pecking order while girls want to connect with each other." "Girls form relationships based on feelings and are better to articulate why they are friends with someone, more often their relationships have an emotional component. Boys at this stage are more followers. They are less able to recognize the reasons for friendship and what friendship really is, beyond surface level interests, like video games or movies." Teachers referred to boys as being able to overcome disagreements faster than girls do: "Boys tend to get over disagreements pretty quickly. They are quick to get upset but also quick to forget the events that led to the problem or disagreement." "While the girls harbor grudges over a long time line the boys fight and the next day are back to being friends without any issues." Teachers also noted that girls are more verbal in their interactions while boys interact through aggression: "Girls stay in groups but love to gossip. Boys respond to each other more aggressively." "Boys are physical with their disagreements and tend to hit or threaten physical harm before anything else."

There are academic differences between boys and girls. Teachers identified girls as outperforming boys academically, stating that girls score higher on tests and more often enrolled in higher level courses: "Girls are high achievers." "On average, I will have more female students in my pre-AP courses and more of them scoring higher." "In my classes the girls usually will have higher scores than the boys." Teachers also referenced their observations of boys as not having as strong a work ethic as girls due to frustration, lower levels of resiliency,

and less sense of responsibility: “Yes, girls are typically more mature and show it academically. Boys are frustrated easier and have less resilience in the school work. They are also less responsible for homework and supplies.” “Girls generally are more focused on school work than playing around with friends and being silly. Boys mature more slowly and find many subjects hilariously amusing while girls have a more mature attitude about things.”

The manner in which the questions were worded and the way in which the educators responded could have allowed for possible stereotyping of boys. However, the final theme (described in the following paragraph) suggests that perhaps the teachers were not stereotyping and were referring to students as individuals with needs more than basing responses on students’ gender.

There are no differences between boys and girls. Teachers indicated that both boys and girls have equal potential: “Boys and girls academically have the same potential and opportunities in my classroom.” Teachers suggested that differences are not so much about gender as about economic status and home life: “The difference comes in terms of economic differences. I taught at a gifted school. Boys there were very advanced. Being around the gifted environment influenced the regular students – they tried harder!! Boys at my current school follow their role models who can be students in legal trouble, or just bad behavior (like throwing other students into the wall).” It was also mentioned that both boys and girls exhibit behavior problems and that these behavior problems are perceived as result of the students’ home life, for example, what is modeled and what is tolerated, more so than their gender: “Their social skills and behavior patterns are largely a function of what they see modeled in the home.” “Too often for the recalcitrant student, their behaviors are either taught or tolerated.”

Teachers' reports of practices and programs implemented by the school to promote the success of boys. Additional questions were asked in the teacher survey pertaining to teachers' perceptions of the practices and programs implemented by the school to promote the success of boys in an attempt to further answer Research Question 1. The frequency and percentage of teachers' responses to closed-ended questions are presented in Table 9.

Table 9

Frequency and Percentages of Teachers' Responses to Survey Questions Pertaining to Practices or Programs Implemented by the School to Promote the Success of Boys

Survey question	*N*	%
Q.6 Are there specific elements of your teaching philosophy that attribute to the success of boys?		
Strongly agree	14	29.2
Agree	24	50.0
Disagree	10	20.8
Total	48	100.0
Q.10 When lesson planning do you keep these differences between boys and girls in mind?		
Strongly agree	6	12.5
Agree	22	45.8
Disagree	18	37.5
Strongly disagree	2	4.2
Total	48	100.0
Q.11 There are particular strategies when implemented in the classroom attribute specifically to the success of boys.		
Strongly agree	10	20.8
Agree	24	50.0
Disagree	14	29.2
Total	48	100.0

Q.13 The school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success academically.		
Strongly agree	10	22.7
Agree	20	45.5
Disagree	12	27.3
Strongly disagree	2	4.5
Total	44	100.0
Q14. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success socially.		
Strongly agree	10	22.7
Agree	20	45.5
Disagree	12	27.3
Strongly disagree	2	4.5
Total	44	100.0
Q15. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success behaviorally.		
Strongly agree	8	18.6
Agree	23	53.5
Disagree	11	25.6
Strongly disagree	1	2.3
Total	43	100.0
Q16. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on family involvement that attribute to the success of boys.		
Strongly agree	6	13.6
Agree	24	54.5
Disagree	13	29.5
Strongly disagree	1	2.3

Total	44	100.0
Q17. The school and/or you as a teacher are implementing practices or programs with community involvement that attribute to the success of boys.		
Strongly agree	5	11.6
Agree	24	55.8
Disagree	14	32.6
Total	43	100.0

The qualitative data pertaining to teachers' perceptions of the practices and programs implemented by the school to promote the success of boys was also analyzed. Themes were identified from the teachers' responses to the open-ended survey questions and classified into pedagogical approaches and parent approaches.

***Pedagogical approaches*.** As reflected in Table 10, teachers described a variety of pedagogical approaches that are used to promote the success of boys. These approaches are listed from most to least frequently mentioned.

Table 10

Frequency of Themes for Teachers' Pedagogical Approaches to Promote the Success of Boys

Theme	Total quotes related to the theme	Examples
Include topics and materials that interest and include boys	20	"Choose novels geared more toward the boys." "Incorporate things that they showed interest in such as sports, drawing."
Be a role model or mentor for boys	12	"They need positive male role models and positive experiences in and outside of school." "Be a model to follow."

Use cooperative learning and small groups	11	"I plan for students to learn how to handle differences and learn about others. I plan activities that build teams and comradery." "Manual projects in which students work in teams and build a sense of community."
Have high expectations	9	"Having high expectations and being consistent as a male role model are important for young boys." "Have high expectations no matter what."
Use participatory and hands-on activities	9	"Boys require more hands-on activities and out-of-seat activities, in order to grasp/understand concepts." "Hands-on activities, engaged and active learning, use more interactive and energizing material."
Connect lessons to the real world	7	"Make lessons connect with the real world." "At the school we have what is called the Gentlemen's Society. This school club represents what a gentleman should behave like, conduct themselves properly and how as a gentleman they can improve the overall school atmosphere."
Build relationships with the students	7	"Listen to students when they have problems or concerns, build relationships and through those relationships get students to receive information in a positive way." "Pull them aside and talk with them about becoming a man. This usually involves what strong attributes I see in them (like being a leader and or confidence) and talk about how these attributes are awesome and can be used in a positive way in class."
Incorporate physical activity into instruction	7	"We incorporate movement within the lessons. Whether it is posting problems around the room, integrating stations or just doing kinesthetic learning allowing them to 'burn' some energy increases focus."

		"Lessons that involve more physical movement seem to promote success for boys."
Use competition	6	"Healthy competitive competition is in order and the boys really like to take advantage of it."
		"A competitive environment seems to motivate male students more so, whereas female students tend to be almost discouraged by the competition – either reluctant to engage at all or less enthusiastic about success/outcome."
Show respect and care to students	5	"I focus on ensuring that they are very aware of the respect I have for them as young men and that I expect them to conduct themselves as young gentlemen and return that respect."
		"I have a safe, respectful, and responsible classroom. I care about the students."
Use differentiated instruction based on ability	4	"Look toward the needs of the children and focus on how they learn."
		"A great deal of patience and differentiating instruction."
Use a teaching style geared toward males	4	"With male students a strong male perspective with an emphasis on how males can achieve success is what males, especially male students need to see."
		"Activities & events directed just towards them. We focus so much on girls' achievements that we are forgetting the boys."
Separate boys and girls	3	"Separating the boys and girls during certain unit activities has shown more participation and willingness to do the activities."
		"Spend time getting to know each student; have advisory classes once a week where single gender groups work together to better understand themselves, their goals, and their actions."
Use effective and consistent communication	2	"Consistency in appropriate rules for communication."
Make learning fun	1	"I believe in having fun.... if it is fun you can learn it."

Let them showcase what they know	1	"Boys can be both academically and socially successful when they are allowed an opportunity to shine."
Give boys more freedom	1	"Boys need constant reminders to keep on track, they need more freedom and understanding than girls."
Encourage resiliency	1	"I try to stress to them the importance of choice in their education and try to put forth the idea of self-reliance and resilience as the most important aspect of their education."

Parent approaches. As shown in Table 11, teachers mentioned parent approaches to promote the success of boys in their responses to the open-ended survey questions. These approaches are listed from most to least frequently mentioned.

Table 11

Frequency of Themes for Teachers' Parent Approaches to Promote the Success of Boys

Theme	Total quotes related to the theme	Examples
Engage parents	6	"Parents are being invited up to meet with teachers and communicate so they can be successful." "Our school has a strong Parent Teacher Association and this brings professionals and the parents together for talent shows, autumn carnivals, winter fairs."
Communicate with parents	2	"More often than not, open communication with the parents seems to be the best, especially when there is follow through on the part of the parent. Persistence on the professional's part to create this is important." "I contact parents often."

Teachers' reports of professional development to promote the success of boys. The frequency and percentage of teachers' responses are presented in Table 12. A limited number of teachers indicated attending a professional development workshop on gender specific strategies (*n* = 6, 13.3%). Similarly, few teachers indicated their school hosted a professional development workshop on gender specific strategies (*n* = 6, 13.3%).

Table 12

Frequency and Percentages of Teacher Responses to Survey Questions Pertaining to Professional Development to Promote the Success of Boys

Survey Question	*N*	%
Q.18 Have you ever attended a professional development workshop on gender specific strategies		
Yes	6	13.3
No	39	86.7
Total	45	100.0
Q.19 Has the school hosted a professional development workshop on gender specific strategies		
Yes	6	13.3
No	39	86.7
Total	45	100.0

Administrator Results

To address the first research question (What, if any, practices or programs are implemented by the school to promote the success of boys?), administrators were asked the following question in the administrator survey: *Do you observe academic, social, and behavioral differences between boys and girls*. Quantitative and qualitative responses were used in reporting results.

Administrators' perceived academic, social, and behavioral differences between boys and girls. All administrators agreed (*n* = 8, 100%) that they observed academic differences between boys and girls. With regard to social differences between boys and girls, the majority of administrators strongly agreed (*n* = 2, 25.0%) or agreed (*n* = 6, 75%) that they observed such differences. The majority of administrators strongly agreed (*n* = 1, 12.5%) or agreed (*n* = 7, 87.5%) that they observed behavioral difference between boys and girls (see Table 13).

Table 13

Frequency and Percentages of Administrators' Responses to Survey Questions Related to Perceived Differences Between Boys and Girls

Survey question	*N*	%
Q.8 Do you observe academic differences between boys and girls?		
Agree	8	100.0
Total	100.0	100.0
Q.9 Do you observe social differences between boys and girls?		
Strongly agree	2	25.0
Agree	6	75.0
Total	8	100.0
Q.10 Do you observe behavioral differences between boys and girls?		
Strongly agree	1	12.5
Agree	7	87.5
Total	8	100.0

Two themes were identified in analyzing the open-ended responses about administrators' perceived differences between boys and girls (Table 14): (a) there are behavioral differences between boys and girls and (b) there are social differences between boys and girls.

Table 14

Frequency of Themes for Administrators' Perceptions of Differences Between Boys and Girls

Theme	Total administrator quotes related to the theme
There are behavioral differences between boys and girls	6
There are social differences between boys and girls	3

There are behavioral differences between boys and girls. The most frequently occurring theme for differences between boys and girls was behavioral differences. Boys are perceived as more active than girls. Administrators also referred to boys as easily distracted, requiring frequent reminders to redirect behaviors. Examples of this theme are seen in the following sample from administrators' responses: "Boys are more active and get more easily distracted." "Boys are much more active and need activity to be successful." "Boys tend to need more frequent reminders to correct their behavior and tend to get physical more often."

There are social differences between boys and girls. The second theme for differences between boys and girls was their social differences. Boys appear to follow a social hierarchy to gain peer approval. This theme is evident in the following administrator responses: "Differences in social interactions with peers. Boys tend to be more playful (horseplay), while girls can be mean and defiant." "It appears that the social hierarchy is more important to them with strong emphasis on gaining approval of peers versus more for adults on the part of girls."

Administrators' reports of practices and programs implemented by the school to promote the success of boys. In continuing to answer Research Question 1, additional questions were asked in the administrator survey pertaining to administrators' perceptions of the practices and programs implemented by the school to promote the success of boys.

The frequency and percentage of administrators' responses to these questions are presented in Table 15. All of the administrators strongly agreed (*n* = 2, 28.6%) or agreed (*n* = 5, 71.4%) that specific elements of their leadership style contribute to the success of boys. Only one (14.3%) administrator disagreed that they observed particular strategies, curriculum, or behavior management techniques that contributed to the success of boys when observing classrooms. Three (42.9%) administrators disagreed that "The school is implementing practices or programs that are having a positive impact on your male students' success academically." Similarly, three (42.9%) administrators disagreed that "The school is implementing practices or programs that are having a positive impact on your male students' success socially." However, only two (28.6%) administrators disagreed that "The school is implementing practices or programs that are having a positive impact on your male students' success behaviorally."

The majority of administrators disagreed (*n* = 4, 57.1%) that "The school is implementing practices or programs that are having a positive impact on family involvement that attribute to the success of boys." Finally, the majority of administrators disagreed (*n* = 4, 57.1%) that "The school is implementing practices or programs with community involvement that attribute to the success of boys."

Table 15

Frequency and Percentages of Administrators' Responses to Survey Questions Pertaining to Practices or Programs Implemented by the School to Promote the Success of Boys

Survey question	*N*	%
Q.7 Are there specific elements of your leadership style that attribute to the success of boys?		
Strongly agree	2	28.6
Agree	5	71.4

Total	7	100.0
Q.11 When observing classroom instruction do you observe particular strategies, curriculum, behavior management techniques, etc. that attribute to the success of boys?		
Strongly agree	1	14.3
Agree	5	71.4
Disagree	1	14.3
Total	7	100.0
Q.12 The school is implementing practices or programs that are having a positive impact on your male students' success academically.		
Strongly agree	1	14.3
Agree	3	42.9
Disagree	3	42.9
Total	7	100.0
Q.13 The school is implementing practices or programs that are having a positive impact on your male students' success socially.		
Agree	4	57.1
Disagree	3	42.9
Total	7	100.0
Q.14 The school is implementing practices or programs that are having a positive impact on your male students' success behaviorally.		
Agree	5	71.4
Disagree	2	28.6
Total	7	100.0
Q.15 The school is implementing practices or programs that are having a positive impact on family involvement that attribute to the success of boys.		
Agree	3	42.9
Disagree	4	57.1
Total	7	100.0
Q.16 The school is implementing practices or programs with community involvement that attribute to the success of boys.		

Agree	3	42.9
Disagree	4	57.1
Total	7	100.0

The qualitative data pertaining to administrators' perceptions of the practices and programs implemented by the school to promote the success of boys was also analyzed. Themes were identified from the administrators' responses to the open-ended survey questions and classified into pedagogical approaches, parent approaches, and programs.

***Pedagogical approaches*.** As reflected in Table 16, administrators noted a variety of pedagogical approaches to promote the success of boys in their responses to the open-ended survey questions. These approaches are listed from most to least frequently mentioned.

Table 16

Frequency of Themes for Administrators' Pedagogical Approaches that Promote the Success of Boys

Theme	Total quotes related to the theme	Examples
Use participatory and hands-on activities	3	"Boys need more activity."
		"More tactile learning assists with boys' success in learning."
Be a role model or mentor for students	2	"Male role models and mentors are actively recruited."
		"Model appropriate behavior"
Include topics and materials that interest and include them	1	"They need to see themselves in what they read and do."
Incorporate physical activity into instruction	1	"We have been doing 'play days' where kids get to spend time in unstructured play outside for an hour. We want to increase the time dedicated to that."

Show respect and care to students	1	"Listen, wait, respect. Let boys have a voice and coach them to have their own thoughts, feelings and appropriate behavior."
Competition	1	"Boys tend to be more successful in hands-on activities but extremely well in any kind of competition."

Parent approaches. Administrators reported one parent approach that promoted the success of boys in their responses to the open-ended survey questions: engaging parents. More specifically, an administrator wrote, "Focus on getting more fathers involved through PTA and other avenues."

Programs. Administrators referenced several programs to promote the success of boys in their responses to the open-ended survey questions, including PBIS Mentoring, CORE leadership, and Volunteers of America Strengthening Families program.

Administrators' reports of professional development to promote the success of boys. The frequency and percentage of administrators' responses to these questions are presented in Table 17. No administrators indicated attending a professional development workshop on gender specific strategies (n = 7, 100%). Similarly, no administrators indicated their school hosted a professional development workshop on gender specific strategies (n = 7, 100%).

Table 17

Frequency and Percentages of Administrator Responses to Survey Questions Pertaining to Professional Development to Promote the Success of Boys

Survey question	*N*	%
Q.17 Have you ever attended a professional development workshop on gender specific strategies		
No	7	100.0
Q.18 Has the school hosted a professional development workshop on gender specific strategies		
No	7	100.0

Research Question 2

The results of the data that pertain to Research Question 2 (Which, if any, of these approaches implemented by the school are identified by research in literature that contribute to the success of boys?) are presented below for teachers and administrators. Results from the qualitative open-ended data from the survey were compared to the strategies identified in the researcher's literature review in order to answer the research question.

The first column of Table 18 lists the approaches the researcher identified in the literature review. The second and third columns indicate whether the approaches were referenced by teachers and administrators in the qualitative open-ended survey responses. Teachers mentioned more approaches that were identified in the research literature than administrators.

Table 18

Approaches Identified in the Literature Review Compared to Approaches Identified by Teachers and Administrators to Promote the Success of Boys

Approaches identified in the literature review	Approach identified by teachers?	Approach identified by administrators?
Pedagogical Approaches		
Focus on student strengths	Yes	No
Use effective and consistent communication	Yes	No
Use a teaching style geared toward boys	Yes	No
Design participatory and hands-on activities	Yes	Yes
Use cooperative learning and small groups	Yes	No
Use differentiated instruction based on ability	Yes	No

Include topics and materials that interest and include boys	Yes	Yes
Separate boys and girls	Yes	No
Have high expectations	Yes	Yes
Incorporate physical activity into instruction	Yes	Yes
Connect lessons to the real world	Yes	Yes
Show respect and care to students	Yes	Yes
Build relationships with the students	Yes	No
Allow boys to have some control over learning	No	No
Emphasize work rather the behaviors	No	No
Use shorter texts	No	No
Incorporate art into instruction.	No	No
Analyze materials for class bias	No	No
Reduce class size	No	No
Parent Approaches		
Communicate with parents	Yes	No
Engage parents	Yes	No
Program Approaches		
Engage students with mentors or role models	Yes	Yes

Research Question 3

The third research question 3 (What, if any, of these approaches implemented by the school are not identified by research in literature, however, appear to contribute to the success of boys?) is answered in Table 19, which presents approaches mentioned by teachers and administrators in the qualitative open-ended survey responses that were not mentioned in the literature review.

Table 19

Approaches Noted by Teachers and Administrators That Are Not Identified in the Researcher's Literature Review

Approaches
Approaches Noted by Teachers That Are Not Identified in the Researcher's Literature Review
Use competition
Make learning fun
Let them showcase what they know
Give boys more freedom
Encourage resiliency
Approaches Noted by Administrators That are Not Identified in the Researcher's Literature Review
Use competition

Research Questions 4 and 5

After completing the data analysis related to the first three research questions, an additional analysis was performed. The teacher survey collected demographic information including years of experience, grade levels taught, level of education, and gender. The distributions of the responses to level of education and gender indicated that it might be valuable to extend the analysis of data within these two categories. One-way ANOVA was used to determine whether there were any statistically significant differences in average agreement with questions in the teacher survey pertaining to approaches promoting the success of boys within the school based on the teachers' level of education (bachelor's degree vs. MEd/EdD) and gender. Each question within the teacher survey is unique to approaches implemented in the school; therefore, survey questions were analyzed individually.

Null hypothesis 1: There are no statistical differences between level of education (bachelor's degree vs. MEd/EdD) and agreement regarding approaches promoting the success of boys within the school.

Null hypothesis 2: There are no statistical differences between gender and agreement regarding approaches promoting the success of boys within the school.

Data Analysis by Teachers' Level of Education

The findings of the ANOVA regarding level of education suggested there were some approaches that showed statistical differences by education level and other approaches where there were no statistical differences. Eleven questions in the teacher survey addressed approaches that promote the success of boys at school. Responses to six of the eleven questions were significantly different: teaching philosophy, practices or programs having a positive impact on male students' success academically, socially, and behaviorally, and practices or programs having a positive impact on family involvement and community involvement that contribute to the success of boys. Results from the six survey questions are organized with a statement of results for each survey question as well as in tables providing complete descriptive and ANOVA statistical data.

Table 20 shows the descriptive statistics for average agreement with whether there are specific elements of teaching philosophy that contribute to the success of boys by teachers' level of education. As seen in Table 21, there was a statistically significant difference in average agreement, $F(1,46) = 4.28$, $p = .04$. Teachers with a bachelor's degree ($M = 2.1304$) expressed significantly more disagreement with this item than teachers holding MEd/EdD degrees ($M = 1.7200$).

Table 20

Descriptive Statistics for Average Agreement with Whether Teaching Philosophy Attributes to Success of Boys by Teachers' Level of Education

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Bachelor's degree	23	2.1304	.62554	.13043	1.8599	2.4009	1.00	3.00
MEd/EdD	25	1.7200	.73711	.14742	1.4157	2.0243	1.00	3.00
Total	48	1.9167	.70961	.10242	1.7106	2.1227	1.00	3.00

Table 21

Results of the ANOVA for Average Agreement with Whether Teaching Philosophy Attributes to the Success of Boys by Teachers' Level of Education

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	2.01	1	2.08	4.28	.04*
Within Groups	21.64	46	0.47		
Total	23.66	47			

*Statistically significant difference: $p < 0.05$

Table 22 gives the descriptive statistics for average agreement with whether the school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success academically by teachers' level of education. Table 23 shows there is a statistically significant difference in average agreement by teachers' level of education, $F(1,42) = 10.94$, $p = .002$. Teachers with a bachelor's degree ($M = 2.5238$) expressed more disagreement with this item than teachers holding MEd/EdD degrees ($M = 1.7826$).

Table 22

Descriptive Statistics for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Male Students' Success Academically by Teachers' Level of Education

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Bachelor's degree	21	2.5238	.74960	.16358	2.1826	2.8650	1.00	4.00
MEd/EdD	23	1.7826	.73587	.15344	1.4644	2.1008	1.00	4.00
Total	44	2.1364	.82380	.12419	1.8859	2.3868	1.00	4.00

Table 23

Results of the ANOVA for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Male Students' Success Academically by Teachers' Level of Education

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	6.031	1	6.031	10.94	.002**
Within Groups	23.151	42	.551		
Total	29.182	43			

**Statistically significant difference: $p < 0.01$

Table 24 presents the descriptive statistics for average agreement with whether the school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success socially by teachers' level of education. There was a statistically significant difference in average agreement by teachers' level of education, $F(1,42) = 10.45$, $p = .002$. Teachers with a bachelor's degree ($M = 2.5000$) expressed more disagreement with this item than teachers holding MEd/EdD degrees ($M = 1.7727$), as shown in Table 25.

Table 24

Descriptive Statistics for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Male Students' Success Socially by Teachers' Level of Education

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Bachelor's degree	22	2.5000	.67259	.14340	2.2018	2.7982	1.00	4.00
MEd/EdD	22	1.7727	.81251	.17323	1.4125	2.1330	1.00	4.00
Total	44	2.1364	.82380	.12419	1.8859	2.3868	1.00	4.00

Table 25

Results of the ANOVA for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Male Students' Success Socially by Teachers' Level of Education

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	5.818	1	5.818	10.45	.002**
Within Groups	23.364	42	.556		
Total	29.182	43			

**Statistically significant difference: $p < 0.01$

Table 26 presents the descriptive statistics for average agreement with whether the school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success behaviorally by teachers' level of education. As seen in Table 27, there is a statistically significant difference in average agreement by teachers' level of education, $F(1,41) = 17.22$, $p = .001$. Teachers with a bachelor's degree ($M = 2.5000$) expressed more disagreement with this item than teachers holding MEd/EdD degrees ($M = 1.7143$).

Table 26

Descriptive Statistics for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Male Students' Success Behaviorally by Teachers' Level of Education

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Bachelor's degree	22	2.5000	.67259	.14340	2.2018	2.7982	1.00	4.00
MEd/EdD	21	1.7143	.56061	.12234	1.4591	1.9695	1.00	3.00
Total	43	2.1163	.73060	.11142	1.8914	2.3411	1.00	4.00

Table 27

Results of the ANOVA for Average Agreement with School and/or Teacher Are Implementing Practices or Programs That Are Having a Positive Impact on Male Students' Success Behaviorally by Teachers' Level of Education

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	6.633	1	6.633	17.22	.001**
Within Groups	15.786	41	.385		
Total	22.419	42			

**Statistically significant difference: $p < 0.01$

Presented in Table 28 are the descriptive statistics for average agreement with whether the school and/or you as a teacher are implementing practices or programs that are having a positive impact on family involvement that contribute to the success of boys by teachers' level of education. Table 29 reveals a statistically significant difference in average agreement by teachers' level of education, $F(1,42) = 13.38$, $p = .001$. Teachers with a bachelor's degree ($M = 2.5455$) expressed more disagreement with this item than teachers holding MEd/EdD degrees ($M = 1.8636$).

Table 28

Descriptive Statistics for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Family Involvement That Attribute to the Success of Boys by Teachers' Level of Education

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Bachelor's degree	22	2.5455	.59580	.12703	2.2813	2.8096	2.00	4.00
MEd/EdD	22	1.8636	.63960	.13636	1.5801	2.1472	1.00	3.00
Total	44	2.2045	.70148	.10575	1.9913	2.4178	1.00	4.00

Table 29

Results of the ANOVA for Average Agreement with School and/or Teacher Are Implementing Practices That Are Having a Positive Impact on Family Involvement That Attribute to the Success of Boys by Teachers' Level of Education

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	5.114	1	5.114	13.38	.001**
Within Groups	16.045	42	.382		
Total	21.159	43			

**Statistically significant difference: $p < 0.01$

Table 30 shows the descriptive statistics for average agreement with whether the school and/or you as a teacher are implementing practices or programs with community involvement that contribute to the success of boys by teachers' level of education. Table 31 shows a statistically significant difference in average agreement by teachers' level of education, $F(1,41) = 4.81$, $p = .03$. Teachers with a bachelor's degree ($M = 2.4091$) expressed more disagreement with this item than teachers holding MEd/EdD degrees ($M = 2.000$).

Table 30

Descriptive Statistics for Average Agreement with School and/or Teacher Are Implementing Practices with Community Involvement That Attribute to the Success of Boys by Teachers' Level of Education

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Bachelor's degree	22	2.4091	.50324	.10729	2.1860	2.6322	2.00	3.00
MEd/EdD	21	2.0000	.70711	.15430	1.6781	2.3219	1.00	3.00
Total	43	2.2093	.63838	.09735	2.0128	2.4058	1.00	3.00

Table 31

Results of the ANOVA for Average Agreement with the School and/or Teacher Are Implementing Practices with Community Involvement That Attribute to the Success of Boys by Teachers' Level of Education

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	1.798	1	1.798	4.81	.03*
Within Groups	15.318	41	.374		
Total	17.116	42			

*Statistically significant difference: $p < 0.05$

Data Analysis by Teachers' Gender

This research study focused on students' gender, paying specific attention to boys; this is extended to analyzing differences in teacher responses by teachers' gender. A one-way ANOVA was used to determine whether there were statistically significant differences in average agreement associated with teacher survey questions pertaining to approaches promoting the success of boys within the school by gender. The findings suggested there was no statistical difference in average agreement within any of the areas across the eleven relevant survey questions.

Summary of Results

The results of the data analysis from surveys administered to teachers and administrators in six Title 1 middle schools located in Texas were reported in this chapter. Teachers and administrators who responded to the cross-sectional survey identified programs and practices that they perceive as attributing to the success of male students in their school. Closed-ended responses were quantified and reported using descriptive statistics. Open-ended responses provided enriching qualitative data that was revealed through themes, and specific quotes from teachers and administrators were given as supporting examples. Additionally, an exploratory analysis by teachers' level of education and gender was conducted to expand the understanding of the data collected through the surveys.

The summary of the study, findings, conclusions, implications, and recommendations for future research are reported in Chapter V.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this research study was to investigate approaches promoting the success of boys within six Title I middle schools located in various parts of Texas. A cross-sectional survey was used to identify the approaches implemented by educators at these schools that contribute to boys' success. The survey was administered once at a single point in time to give a snapshot of current practices and programs (Gay, Mills, & Airasian, 2009). Structured (closed-ended) items with Likert-type responses provided quantitative data, while unstructured (open-ended) items allowed respondents to elaborate on specifics of these programs and practices. These schools in Texas were identified by performance ratings of male students on the 2017 STAAR. The following criteria were used in selecting the schools for this study: (a) the school needed to be a middle school containing all three grade levels to which the STAAR is administered (grades six, seven, and eight); (b) the school needed to have a similar number of male students and female students taking the STAAR assessment; (c) the percentage of males achieving 'meets grade level' on the STAAR had to be equal to or greater than that of females in all testing areas for the grade level; and (d) the percentage of males achieving 'meets grade level' on the STAAR had to be equal to or greater than that of females in all testing areas for at least two of the three grade levels (e.g., 6th grade and 8th grade).

There is a compelling argument that there is a crisis concerning boys' academic and social success. Johnson and Gooliaff (2013) claimed, "current classroom practices disadvantage boys and contribute to higher school drop-out rates, lack of completion of college degrees, and anti-social behavior" (p. 28). National and international reports present girls outperforming boys in reading and closing the gap in other subjects. Economically disadvantaged students are also

not performing as well as those who are more affluent. In the era of high-stakes testing, it is beneficial for Texas to have an in-depth study of six middle schools that, despite challenges, are successfully helping their male students succeed.

The goal of this study was to find practices that could provide administrators and teachers with knowledge and tools for promoting the success of boys—especially those in poverty. Title I schools in Texas with similar populations (as well as other schools in different states) could benefit from this knowledge, as could their male students.

Johnson and Gooliaff (2013) stated, "When boys enter the classroom, they are expected to behave in ways that are not natural for them" (p. 28). This study attempts to explore that by adding to the existing body of literature in the area of educating boys, while continuing the discussion of school practices that promote success for not only them but for all students to achieve academic, social, and emotional growth during their school experience.

The goals of this study were to obtain an understanding of the lived experiences of school faculty (teachers and administrators) and to report any new understandings of practices that contribute to the success of boys in six Title I middle schools in order to answer the research questions.

The following question guided this study: What approaches can be identified as promoting the success of boys within Title I middle schools located in Texas school districts? The following questions addressed the guiding question:

1. What, if any, practices or programs are implemented by the school to promote the success of boys?
2. Which, if any, of these approaches implemented by the school are identified by research in the literature as contributing to the success of boys?

3. What, if any, of these approaches implemented by the school are not identified by research in the literature, yet appear to contribute to the success of boys?
4. Are there statistically significant differences in average agreement associated with teacher survey questions pertaining to approaches promoting the success of boys within the school by level of education (bachelor's degree vs. MEd/EdD)?
5. Are there statistically significant differences in average agreement associated with teacher survey questions pertaining to approaches promoting the success of boys within the school by gender?

Summary of Findings

The study revealed meaningful findings in response to the research questions posed. The summary of findings from this study suggest that the six middle schools are implementing practices and programs that contribute to the success of boys. An overwhelming majority of teachers and administrators agreed that their schools were in fact implementing programs and practices that contribute to the success of boys. These educators also made valuable comments in response to the open-ended portion of the survey regarding what specific approaches they were implementing, thereby allowing themes and categories to be established to explain the findings, as described below.

In response to whether boys and girls exhibit academic, social, and behavioral differences, 100% of administrators and 98% of teachers were in agreement that there are differences between boys and girls in all three areas. Respondents provided the following specific insights: boys are less mature than girls and girls are more focused; boys' behavior is more aggressive than girls; boys appear to be followers and do not necessarily apply depth of

reasoning to their friendship; boys tend to overcome disagreements more rapidly; and boys tend to interact through aggression while girls are more verbal in their interactions.

Research Question 1

To answer Research Question 1 regarding practices or programs implemented by the school to promote the success of boys, the findings in this study revealed that a majority of teachers and administrators both strongly agreed or agreed with all of the statements pertaining to practices and programs implemented by the school to promote the success of boys. However, administrators had a higher percentage of disagreement with the statements pertaining to family and community involvement. A series of open-ended items helped reveal the most commonly mentioned programs and practices by both teachers and administrators as contributing to the success of boys in their schools. The strategies are as follows: include topics and materials that interest and include boys; be a role model or mentor for boys; use cooperative learning and small groups; have high expectations; use participatory and hands-on activities; connect lessons to the real world; build relationships with the students; incorporate physical activity into instruction; use competition; and show respect and care to students.

Research Question 2

In response to Research Question 2 regarding approaches implemented by the school that had previously been identified by research in the literature as contributing to the success of boys, the findings in this study support the use of the same practices that are described in the literature. Teachers identified more strategies that were also identified in the literature than did administrators. Sixteen pedagogical approaches were mentioned in the open-ended responses. Of those 16, 10 were mentioned by teachers while only 4 were specifically mentioned by administrators. The pedagogical approaches aligning with the literature are as follow: focus on

student strengths; use effective and consistent communication; use a teaching style geared toward boys; design participatory and hands-on activities; use cooperative learning and small groups; use differentiated instruction based on ability; include topics and materials that interest and include boys; separate boys and girls; have high expectations; and incorporate physical activity into instruction. Two parent approaches were commonly referenced by teachers but not by administrators: communicate with parents and engage parents. Specific programmatic approaches referenced in the literature that were also mentioned by both teachers and administrators included engaging students with a mentor or role model.

Research Question 3

As for Research Question 3 regarding approaches used by teachers that were not identified by research in the literature, the findings from the study indicate that the schools were implementing some practices and programs not mentioned in the researcher's literature review. Teachers referenced the following: connect lessons to the real world; build relationships with the students; use competition; show respect and care to students; make learning fun; let them showcase what they know; give boys more freedom; and encourage resiliency. Administrators mentioned two strategies that were similar to those mentioned by the teachers: use competition and show respect and care to students.

Research Questions 4 and 5

Research questions 4 and 5 were developed from an exploratory analysis of the effect of teacher's level of education (bachelor's degree vs. MEd/EdD) and gender on agreement with statements in the study showed that gender of teachers played no significant role in agreement with statements. However, the results for level of education suggested significant difference in agreement. Teachers with higher levels of education (MEd/EdD compared to bachelor's degree)

demonstrated significantly higher agreement more with the survey statements that the school or they themselves as teachers were implementing practices and programs that contribute to the success of boys.

Implications

Administrators had a higher percentage of disagreement than teachers about whether family and community involvement contributes to the success of boys. This raises question about whether teachers were in higher agreement because they have more consistent contact with families or whether the administrators are holding the school to a higher standard, wanting to implement more connection with students' families and greater community involvement.

Administrators did not identify many of the practices proposed in the literature that support the success of boys, which was surprising because they tend to have more education. This may account for the lack of professional development in the area of successfully supporting boys.

Few, if any, teachers or administrators had participated in professional development related to instructional practices that promote the success of boys in the classroom. Therefore, this appears to be an area of need. This raises the following questions: Where are the teachers getting information or support on implementing best practices for boys in the classroom? Do their practices emerge from teachers' practical wisdom and experience in teaching boys and girls? How could they be better supported by administration?

The following comment, made by a teacher, speaks to the need for professional development focusing on boys: "I believe there should be professional development opportunities that focus on the academic/social needs of male students." The only comment that mentioned a specific training program as it relates to boys was Kagan Cooperative Learning.

The following response to the open-ended question about professional development was this: "Kagan Training on cooperative learning strategies; helped them know what to do when in the classroom and increased cooperative skills with classmates." As this program was referenced so specifically, it might be a beneficial professional development to explore.

The ANOVA analysis revealed there was a statistically significant difference between teachers with more education and those with less education with regard to agreeing that they employed practices that support boys. This suggests that additional education or professional development could support these practices in schools.

The data revealed within this study implies that, in fact, the practices suggested by the literature in terms of strategies to support boys are indeed significant to the success of boys. The educators involved in this study used many of the practices referenced in the literature; therefore, a sound argument may be made that other educators should implement these programs and practices in an effort to close the achievement gap between boys and girls.

Limitations

This study is not without limitations. The study was completed within a set time span and therefore was unable to show the effects or outcomes of recommended practices over an extended period. Additional limitations include the availability and agreement of qualified faculty members to participate in the in the survey. Thus, the study results are based on a relatively small number of responses from among a larger group. Increasing the number of participants could add valuable information to the study. Additionally, those faculty members who responded to the survey relied upon memory for accounts that were not observed by the researcher.

Six schools participated in the study; however, two additional schools were identified. One of the two schools chose not to participate, while the other school did not have open access to teacher and administrator email addresses, making it impossible to send surveys to these educators. Within the six schools that did participate, the small sample size and low response rate of 14.8% teachers and 34.8% of administrators is a limitation. This limited the amount of additional data that could have contributed to a larger base of data for analysis.

Additional schools were identified that demographically matched the schools studied, but their male student populations were not showing signs of success as measured by STAAR. These comparable schools were sent surveys; however, there was insufficient comparable data to include in this study due to the extremely low return rate.

Recommendations for Future Research

This study was limited in that it considered a small sample of teachers within only six schools in Texas. Although this study revealed quality data, it would be beneficial to the literature base as well as to schools, especially male students, if further studies were conducted. The following recommendations are made for future research:

1. An in-depth study of the impact of teachers' level of education and professional development experiences on their understanding and use of strategies that relate to the success of both males and females.
2. Case studies of these six schools could be carried out, which would involve more in-depth data collection through observations as well as interviews of teachers, administrators, students, and parents. The same in-depth case studies should be conducted at schools in other states as well.

3. A longitudinal study of these six schools and their students over time would reveal patterns that may validate the rate of success of these strategies.
4. As this study included a small sample, it would be beneficial to identify more schools in Texas and other states that meet the criteria to repeat the study with a larger number of participants.
5. Additionally, schools where the male students are not performing as well should be examined and investigated with regard to how they differ from the schools in the study with male students that are doing well.
6. This study should also be replicated at various school levels, including elementary and high school.

Conclusion

Although the primary focus of this study was programs and practices that contribute to the success of boys, it is important that strategies to support academic, social, and behavioral growth of both boys and girls are investigated and implemented. Continuing to learn from research is necessary as educators refer to the literature as a means of learning quality practices; however, educators must also have a strengths-based mindset and be prepared to learn from students. A comment made by one teacher in response to an open-ended item within the survey sums up the essence of this approach: “I work on the theory that these students have talents and abilities and that they have the capacity to teach me new things as we work together.”

References

Alderman, M. K. (2013). *Motivation for achievement: Possibilities for teaching and learning*. New York, NY: Routledge.

Armstrong, T. (2012). *Neurodiversity in the classroom: Strength-based strategies to help students with special needs succeed in school and life*. Alexandria, VA: ASCD.

Belgrave, F. Z., & Brevard, J. K. (2016). *African American boys: Identity, culture, and development*. New York, NY: Springer.

Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher, 34*(6), 3–15.

Bristol, T. J. (2015). Teaching boys: Towards a theory of gender-relevant pedagogy. *Gender and Education*, *27*(1), 53–68.

Campos, D. (2013). *Educating Latino boys: An asset-based approach*. Thousand Oaks, CA: Corwin.

Cleveland, K. P. (2011). *Teaching boys who struggle in school: Strategies that turn underachievers into successful learners*. Alexandria, VA: ASCD.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Cullen, J. B., Levitt, S. D., Robertson, E., & Sadoff, S. (2013). What can be done to improve struggling high schools? *Journal of Economic Perspectives*, *27*(2), 133–152.

Douglas, K. M., & Jaquith, D. B. (2015). *Engaging learners through artmaking: Choice-based art education in the classroom*. New York, NY: Teachers College Press.

Edwards-Omolewa, N. D. (2007). Elementary school children's strategy use and strategy preferences on multidigit addition and subtraction story problems. University of Delaware.

Egan, K. (1998). *The educated mind: How cognitive tools shape our understanding*. Chicago, IL: University of Chicago Press.

Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhanu, G. (2011). Factors affecting students' quality of academic performance: a case of secondary school level. *Journal of Quality and Technology Management, 7*(2), 1–14.

Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance—A critical literature review*. Chicago, IL: University of Chicago Consortium on Chicago School Research.

Fink, A. (2013). *Conducting research literature reviews: From the internet to paper*. Thousand Oaks, CA: Sage.

Fletcher, J., Najarro, A., & Yelland, H. (Eds.) (2015). *Fostering habits of mind in today's students: A new approach to developmental education*. Sterling, VA: Stylus.

Gay, L. R., Mills, G. E., & Airasian, P. W. (2009). *Educational research: Competencies for analysis and applications* (9th ed.). Upper Saddle River, NJ: Pearson Education.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Hawthorne, NY: Aldine.

Gorski, P. C. (2013). Building a pedagogy of engagement for students in poverty. *Phi Delta Kappan, 95*(1), 48–52.

Gorski, P. C. (2015). *Reaching and teaching students in poverty: Strategies for erasing the opportunity gap*. New York, NY: Teachers College Press.

Gurian, M., & Stevens, K. (2004). With boys and girls in mind. *Closing Achievement Gaps*, *62*(3), 21–26.

Gurian, M., & Stevens, K. (2005). *The minds of boys.* San Francisco, CA: Jossey-Bass.

Gurian, M., Stevens, K., & King, K. (2008). *Strategies for teaching boys and girls, secondary level: A workbook for educators*. San Francisco, CA: Jossey-Bass.

Hall, S. S., Hustyi, K. M., Hammond, J. L., Hirt, M., & Reiss, A. L. (2014). Using discrete trial training to identify specific learning impairments in boys with fragile X syndrome. *Journal of Autism and Developmental Disorders*, *44*(7), 1659–1670.

Halpern D., Eliot, L., Bigler, R. Fabes, R., Hanish, L., Hyde, J., Liben, L, & Martin, L. (2011). The pseudoscience of single-sex schooling. *Science*, *333*(6050), 1706–1707.

Hamblet, E. C., & Council for Exceptional Children. (2011). *7 steps for success: High school to college transition strategies for students with disabilities*. Arlington, VA: Council for Exceptional Children.

Haridarshan, P. (2015). The impact of differing maternal expectations on the academic achievements of primary school children in Urban Bangalore, South: A comparison between boys and girls. *Support for Learning*, *30*(3), 192–204.

Harding, D. J. (2010). *Living the drama: Community, conflict, and culture among inner-city boys*. Chicago, IL: University of Chicago Press.

Heemskerk, I., Kuiper, E., & Meijer, J. (2014). Interactive whiteboard and virtual learning environment combined: Effects on mathematics education. *Journal of Computer Assisted Learning*, *30*(5), 465–478.

Hinshaw, S. P., & Scheffler, R. M. (2014). *The ADHD explosion: Myths, medication, money, and today's push for performance*. Oxford; New York: Oxford University Press.

Howard, T. C. (2015). *Why race and culture matter in schools: Closing the achievement gap in America's classrooms*. New York, NY: Teachers College Press.

Jackson, B., & Hilliard, A. (2013). Too many boys are failing in American schools: What can we do about it? *Contemporary Issues in Education Research*, *6*(3), 311–316.

James, A. N. (Ed.) (2015). *Teaching the male brain: How boys think, feel, and learn in school*. Thousand Oaks, CA: Corwin.

Jensen, E. (2005). *Teaching with the brain in mind*. Alexandria, VA: ASCD.

Johnson, C., & Gooliaff, S. (2013). Teaching to strengths: Engaging young boys in learning. *Reclaiming children and youth*, *21*(4), 28.

Kagan, S. (2014). *Brain-friendly teaching*. San Clemente, CA: Kagan.

Keddie, A. (2009). A framework for 'best practice' in boys' education: Key requisite knowledges and productive pedagogies. *Pedagogy, Culture and Society*, *13*(1), 59–74.

Kena, G., Aud, S., Johnson, F., Wang, X., Zhang, J., Rathbun, A., Kristapovich, P. (2014). *The condition of education: 2014*. Retrieved from https://nces.ed.gov /pubs2014/ 2014083.pdf

Kirby, E. (2012). *Essential measures for student success: Implementing cooperation, collaboration, and coordination between schools and parents*. Lanham, MD: Rowman & Littlefield.

Kuykendall, C. (2012). *From rage to hope: Strategies for reclaiming Black and Hispanic students*. Bloomington, IN: Solution Tree.

Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Thousand Oaks, CA: Sage.

Kyriakides, L., Creemers, B. M., Papastylianou, D., & Papadatou-Pastou, M. (2014). Improving the school learning environment to reduce bullying: An experimental study. *Scandinavian Journal of Educational Research*, *58*(4), 453–478.

Lapan, R. T., Marcotte, A. M., Storey, R., Carbone, P., Loehr-Lapan, S., Guerin, D., . . . Mahoney, S. (2016). Infusing career development to strengthen middle school English language arts curricula. *Career Development Quarterly*, *64*(2), 126–139.

Legewie, J., & DiPrete, T. A. (2012). School context and the gender gap in educational achievement. *American Sociological Review*, *77*(3), 463–485.

Lilja, M. (2013). *Resisting gendered norms: Civil society, the juridical and political space in Cambodia*. Surrey, UK: Ashgate.

MacDonald, B. (2005). *Boy smarts: Mentoring boys for success at school*. Surrey, B.C., Canada: Mentoring Boys Press.

Marrs, H., & Sigler, E. A. (2012). Male academic performance in college: The possible role of study strategies. *Psychology of Men & Masculinity*, *13*(2), 227–241.

Martin, M. O., & Mullins, I. V. S. (Eds.) (2013). *TIMSS and PIRLS 2011: Relationships among reading, mathematics, and science achievement at the fourth grade implications for early learning*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, California: Jossey-Bass.

Miller, D. I., & Halpern, D. F. (2014). The new science of cognitive sex differences. *Trends in Cognitive Sciences*, *18*(1), 37–45.

Miville, M. L. (2013). *Multicultural gender roles: Applications for mental health and education*. Hoboken, NJ: Wiley.

Morgan, J. J., & Raines, T. C. (2011). *Addressing the needs of students living in poverty through comprehensive school reform*. Las Vegas, NV: UNLV College of Education.

Muchnick, C. C. (2011). *The everything guide to study skills: Strategies, tips, and tools you need to succeed in school!* Avon, MA: Adams Media.

National Center for Education Statistics (2011a). The nation's report card: Mathematics 2011. Retrieved from https://nces.ed.gov/nationsreportcard/ pdf/main2011/2012458.pdf

National Center for Education Statistics (2011b). The nation's report card: Reading 2011. Retrieved from https://nces.ed.gov/nationsreportcard/pdf/main2011/2012457.pdf

Organisation for Economic Cooperation and Development (2010). *PISA 2009 results: Executive summary*. Retrieved from https://www.oecd.org/pisa/pisaproducts/46619703.pdf

Orr, C., Driscoll, D., Taymans, M., Alonso, A., David, A., & Fabrizio, L. (2011). The nation's overlapping fields of practice. *Action Learning: Research and Practice, 10*(3), 230–243.

Pahlke, E., Hyde, J., & Allison, C. (2014). The effects of single-sex compared with coeducational schooling on students' performance and attitudes: A meta-analysis. *Psychological Bulletin, 140*(4), 1042–1072.

Parkay, F. W., Anctil, E. J., & Hass, G. (2013). *Curriculum leadership: Readings for developing quality educational programs* (10th ed.). Upper Saddle River, NJ: Pearson.

Piechura-Couture, K., Heins, E., & Tichenor, M. (2013). The boy factor: Can single-gender classes reduce the over-representation of boys in special education? *College Student Journal, 47*(2), 235–243.

Pope, D. C., Brown, M., & Miles, S. B. (2015). *Overloaded and underprepared: Strategies for stronger schools and healthy, successful kids*. San Francisco, CA: Jossey-Bass.

Potter, C. (2015). 'I didn't used to have much friends': Exploring the friendship concepts and capabilities of a boy with autism and severe learning disabilities. *British Journal of Learning Disabilities*, *43*(3), 208–218.

OECD Programme for International Student Assessment. (2014). *PISA 2012 Results: What Students Know and Can Do: Student Performance in Mathematics, Reading and Science (Volume I)*. Revised edition. Retrieved fromhttp://search.ebscohost.com.libproxy.txstate.edu/login.aspx?direct=true&db=ecn&AN=1467299&site=eds-live&scope=site

Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (2013). Math anxiety, working memory, and math achievement in early elementary school. *Journal of Cognition and Development*, *14*(2), 187–202.

Rand, J. (2013). Action learning and constructivist grounded theory: Powerfully overlapping fields of practice. *Action Learning: Research and Practice*, *10*(3), 230–243.

Reichert, M., & Hawley, R. (2013). Relationships play primary role in boys' learning. *The Phi Delta Kappan*, 94(8), 49-53.

Reichert, M., Hawley, R. A., & Tyre, P. (2013). *Reaching boys, teaching boys: Strategies that work—And why*. San Francisco, CA: Jossey-Bass.

Roseberry-McKibbin, C. (2013). *Increasing language skills of students from low-income backgrounds: Practical strategies for professionals* (2nd ed.). San Diego, CA: Plural.

Sadker, M., & Sadker, D. (2010). *Failing at fairness: How America's schools cheat girls*. New York, NY: Simon and Schuster.

Sáenz, V. B., Bukoski, B. E., Lu, C., & Rodriguez, S. (2013). Latino males in Texas community colleges: A phenomenological study of masculinity constructs and their effect on college experiences. *Journal of African American Males in Education, 4*(2), 82–102.

Sáenz, V. B., & Ponjuan, L. (2011). Men of color: Ensuring the academic success of Latino males in higher education. *Institute for Higher Education Policy*, *12*(4), 611–703.

Sallis, R. J. T. (2014). Ethnographic performance and drama education: A meaningful communication between researcher, teacher, and student. *Youth Theatre Journal*, *28*(1), 3–17.

Schargel, F. P., & Smink, J. (2014). *Strategies to help solve our school dropout problem*. New York, NY: Routledge.

Sommers, C. H. (2013). *The war against boys: How misguided policies are harming our young men*. New York, NY: Simon and Schuster.

Sudha, D. K. (2000). *Gender roles*. New Delhi, India: APH.

Texas Education Agency. (2010). *STARR to Replace TAKS*. Retrieved from http://www.tea.state.tx.us/index4.aspx?id=7874

Texas Education Agency. (2012). *Overview of the academic excellence indicator system 1990–91 through 2011–12*. Retrieved from: http://ritter.tea.state.tx.us/perfreport/aeis /about.aeis.htmlaeis/about.aeis.html

Texas Education Agency. (2013). *Counts of students and discipline actions by discipline action groupings; Peims 2012–2013 data*. Retrieved from http://ritter.tea.state.tx.us/ cgi/sas/broker

Texas Education Agency. (2014a). *TEA mission and responsibilities*. Retrieved from http://www.tea.state.tx.us/index2.aspx?id=150

Texas Education Agency. (2014b). *Texas essential knowledge and skills*. Retrieved from http://www.tea.state.tx.us/index2.aspx?id=6148&menu_id=720&menu_id2=785

Texas Education Agency. (2015). *Title I, part A – Improving basic programs*. Retrieved from http://tea.texas.gov/index2.aspx?id=25769814444

Texas Education Agency. (2018). *Public education information management system*. Retrieved from https://tea.texas.gov/Reports_and_Data/Data_Submission/ PEIMS/ Public_ Education_Information_Management_System/

Thompson, S., Provasnik, S., Kastberg, D., Ferraro, D., Lernanski, N., Roey, S., & Jenkins, F. (2013). *Highlights from PIRLS 2011: Reading achievement of U.S. fourth-grade students in an international context*. Retrieved from https://nces.ed.gov/pubsearch/ pubsinfo.asp?pubid=2013010rev

Tidwell, R., & Garrett, S. C. (1994). Youth at risk: In search of a definition. *Journal of Counseling & Development*, *72*(4), 444–446.

Valentin, I. (1997). *Title IX: A brief history. 25 years of title IX*. Retrieved from http://www2.edc.org/womensequity/pdffiles/t9digest.pdf

Van Hoorn, J., Nourot, P. M., Scales, B., & Alward, K. R. (6th ed.) (2014). *Play at the center of the curriculum*. Upper Saddle River, NJ: Pearson.

Voyer, D., & Voyer, S. D. (2014). Gender differences in scholastic achievement: A meta-analysis. *Psychological Bulletin*, *140*(4), 1174–1204.

Wolfensberger, M. V. C. (2012). *Teaching for excellence. Honors pedagogies revealed*. New York, NY: Waxmann.

Yin, R. (2009). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

You, Z. (2010). Gender differences in mathematics learning. *School Science & Mathematics*, *110*(3), 115–117.

Younger, M., Warrington, M., & McLellan, R. (2005). *Raising boys' achievement in secondary schools: Issues, dilemmas and opportunities*. New York, NY: McGraw-Hill Education.

APPENDIX A

CONSENT FORM

Informed Consent for Practices that attribute to the success of boys: A study of Title 1 middle schools in Texas.

Researcher's Affiliation
The researcher, Laura Duhon, is completing a doctoral dissertation in Education Leadership, Management and Policy at Seton Hall University located in South Orange, New Jersey. The title of the study is "Practices that attribute to the success of boys: A study of Title 1 middle schools in Texas."

Purpose
The purpose of the study is to investigate practices and programs implemented throughout the school that contribute to the success of boys. Completing an online survey should take approximately 20 minutes.

Procedures
Participation in the study entails completing an online survey at a time convenient for the participant. The survey should take only 20 minutes to complete.

Instrument
The survey instrument is specific to this research study. There are two types of questions. Closed-ended questions will allow the participant options to choose. Open-ended questions will provide an opportunity to share specific information about the question to enrich the study with additional information.

Voluntary Participation
Participation in the study is voluntary. The participant can discontinue participation at any point without penalty or negative impact.

Anonymity
The information gathered through the survey responses will be used solely for research analysis. The confidentially of the survey responses, school, and school district will be preserved. To maintain anonymity, each school will be given a pseudonym. The anonymity of the responses to the survey will be preserved by not connecting responses to an individual. When administering an online survey there is always a possibility of hacking online material.

Confidentiality
Data collected from the survey will be stored on a USB memory key and secured in a locked cabinet by the researcher.

Records
The researcher and dissertation committee will view the data, which will be saved in a secured location.

Risks
There are no anticipated risks associated with participating in this study.

Benefits
The expected benefits from participating in this study will contribute and broaden the overall understanding of what practices and programs attribute to the success of boys. The information revealed will assist the school in identifying these practices and programs as well as inform other educators.

Compensation
There is no compensation for participating in this study.

Alternative Procedures
There are no appropriate alternative procedures or courses of treatment that might be advantageous for the subject as a result of this research study.

Contact Information
Questions about the research study and rights as a participant can be directed to Laura Duhon, the researcher and student at Seton Hall University. In addition, questions can be directed to researcher's mentor, Dr. Daniel Gutmore as well as the Director of Seton Hall University Institutional Review Board, Dr. Mary Ruzicka.

Dr. Daniel Gutmore, Researcher's Mentor
Seton Hall University
Department of Education Leadership Management and Policy
400 South Orange Avenue
South Orange, New Jersey 07079
973-275-2853

Dr. Mary Ruzicka, Director of Seton Hall University Institutional Review Board
Seton Hall University
400 South Orange Avenue
South Orange, New Jersey 07079
973-313-6314

Consent
If you would prefer not to participate in the study, please do not complete the survey.

If you consent to participate, please complete the survey.

APPENDIX B

Letter of Solicitation

Dear Teachers and Administrators,

My name is Laura Duhon and I am a doctoral student in the Department of Education Leadership, Management and Policy at Seton Hall University located in South Orange, New Jersey. I am inviting you to participate in a research study I am conducting for a dissertation.

The purpose of this study is to investigate practices and programs implemented by the school that attribute to the success of boys. This research study will contribute and broaden the overall understanding of what practices and programs attribute to the success of boys.

Participation in the study entails completing a survey, which should take only 20 minutes to complete.

The survey instrument is specific to this research study. There are two types of questions. Closed-ended questions will allow you options to choose. Open-end questions will provide an opportunity to share specific information about the question to enrich the study with additional information.

Participation in the study is voluntary. You can refuse to participate or discontinue participation at any point without penalty or negative impact.

The information gathered through the survey will be used solely for research analysis. The anonymity of the responses to the survey will be preserved by not connecting responses to an individual. When administering an online survey there is always a possibility of hacking online material.

Data collected from the survey will be stored on a USB memory key and secured in a locked cabinet.

Thank you for your consideration and participation in this research study.

Sincerely,

Laura Duhon

APPENDIX C

Administrator Survey

1. What is your gender? Male or Female
2. Years of experience as a teacher: _____
3. Grade levels/subjects taught:
4. Years of experience as an Administrator and for which grade levels: _____
5. Years of experience at current school and in what capacities: _____
6. Level of Education:

    Undergraduate

    Graduate/Masters

    EdD, PhD, or Equivalent

7. Are there specific elements of your leadership style that attribute to the success of boys?

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information expanding on those elements specifically in relation to the success of male students in your school:

8. Do you observe differences between boys and girls throughout the school environment, including the classroom (academically, socially, and/or behaviorally)? Academically:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these differences that you observe:

9. Do you observe differences between boys and girls throughout the school environment including the classroom (academically, socially, and/or behaviorally)? Socially:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these differences that you observe:

10. Do you observe differences between boys and girls throughout the school environment including the classroom (academically, socially, and/or behaviorally)? Behaviorally:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these differences that you observe:

11. When observing classroom instruction, do you observe particular strategies, curriculum, behavior management techniques, etc. that attribute to the success of boys?

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these strategies/techniques you observe that attribute to the success of boys:

12. The school is implementing practices or programs that are having a positive impact on your male students' success (academically, socially, and/or behaviorally). Academically:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices or programs:

13. The school is implementing practices or programs that are having a positive impact on your male students' success (academically, socially, and/or behaviorally). Socially:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices or programs:

14. The school is implementing practices or programs that are having a positive impact on your male students' success (academically, socially, and/or behaviorally). Behaviorally:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices or programs:

15. The school is implementing practices or programs that are having a positive impact on family involvement that attribute to the success of boys.

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices and programs:

16. The school is implementing practices or programs with community involvement that attribute to the success of boys.

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices and programs:

17. Have you ever attended a professional development workshop on gender specific strategies?

    Yes

    No

    Please describe how it was helpful specifically to the success of boys?

    If not gender specific, what professional development have you attended that has had a positive impact on boys?

18. Has the school hosted a professional development workshop on gender specific strategies?

    Yes

    No

    Please describe how it was helpful specifically to the success of boys?

    If not gender specific, what professional development has the school hosted that has had a positive impact on boys and how specifically has it attributed to the success of boys?

19. Is there anything else you would like to add that you think is beneficial to know in regards to what has attributed to the success of boys at your school?

APPENDIX D

Teacher Survey

1. What is your gender? Male or Female
2. Years of experience as a teacher: _____
3. Grade levels/subjects taught:
4. Years of experience at current school and in what capacities: _____
5. Level of Education:

   Undergraduate

   Graduate/Masters

   EdD, PhD, or Equivalent
6. Are there specific elements of your teaching philosophy that attribute to the success of boys?

   Strongly agree

   Agree

   Disagree

   Strongly disagree

   Please add additional information expanding on those elements specifically in relation to the success of male students in your school:

7. Do you observe differences between boys and girls (academically, socially, and/or behaviorally)? Academically:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these differences that you observe:

8. Do you observe differences between boys and girls (academically, socially, and/or behaviorally)? Socially:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these differences that you observe:

9. Do you observe differences between boys and girls (academically, socially, and/or behaviorally)? Behaviorally:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these differences that you observe:

10. When lesson planning, do you keep these differences between boys and girls in mind?

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these strategies/techniques you observe that attribute to the success of boys:

11. There are particular strategies when implemented in the classroom attribute specifically to the success of boys.

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Share about a time in a lesson that you implemented where there was evidence that the boys were academically and/or socially successful:

12. Share about an additional time in a lesson that you implemented where there was evidence that the boys were academically and/or socially successful:

13. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success (academically, socially, and/or behaviorally). Academically:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices or programs:

14. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success (academically, socially, and/or behaviorally). Socially:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices and programs:

15. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on your male students' success (academically, socially, and/or behaviorally). Behaviorally:

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices and programs:

16. The school and/or you as a teacher are implementing practices or programs that are having a positive impact on family involvement that attribute to the success of boys?

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices and programs:

17. Has school and/or you as a teacher are implementing practices or programs with community involvement that attribute to the success of boys.

    Strongly agree

    Agree

    Disagree

    Strongly disagree

    Please add additional information about these practices and programs:

18. Have you ever attended a professional development workshop on gender specific strategies?

    Yes

    No

    If so, how was it helpful specifically to the success of boys?

    If not gender specific, what professional development have you attended that has had a positive impact on boys?

19. Has the school hosted a professional development workshop on gender specific strategies?

    Yes

    No

    If so, how was it helpful specifically to the success of boys?

    If not, what professional development has the school hosted that has had a positive impact on boys and how specifically has it attributed to the success of boys?

20. Is there anything else you would like to add that you think is beneficial to know in regards to what has attributed to the success of boys at your school?

APPENDIX E

IRB APPROVAL

SETON HALL UNIVERSITY
1 8 5 6

April 9, 2018

Laura Duhon
[redacted]

Dear Ms. Duhon,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "Practices that Attribute to the Success of Boys: A Study of Title 1 Middle Schools in Texas." Your research protocol is hereby accepted as revised and is categorized as exempt.

Please note that, where applicable, subjects must sign and must be given a copy of the Seton Hall University current stamped Letter of Solicitation or Consent Form before the subjects' participation. All data, as well as the investigator's copies of the signed Consent Forms, must be retained by the principal investigator for a period of at least three years following the termination of the project.

Should you wish to make changes to the IRB approved procedures, the following materials must be submitted for IRB review and be approved by the IRB prior to being instituted:

- Description of proposed revisions;
- *If applicable*, any new or revised materials, such as recruitment fliers, letters to subjects, or consent documents; and
- *If applicable*, updated letters of approval from cooperating institutions and IRBs.

At the present time, there is no need for further action on your part with the IRB.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,

Mary F. Ruzicka, Ph.D.

Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Daniel Gutmore